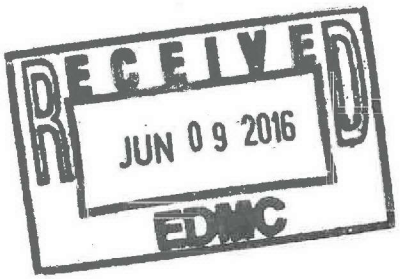
Office of River Protection
Project Managers' Meeting Minutes

2440 Stevens Center
Richland, Washington

April 21, 2016



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CONCURRENCE SIGNATURES

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Project Managers' Meeting.

Wahed Abdul, DOE-ORP — Date: 6/2/16

Jeff Bruggeman, DOE-ORP — Date: 6/6/16

Joni Grindstaff, DOE-ORP — Date: 6/1/16

Paul Hernandez, DOE-ORP — Date: 5/24/16

Jeremy Johnson, DOE-ORP — Date: 5/24/16

Chris Kemp, DOE-ORP — Date: 5-24-2016

Dan Knight, DOE-ORP — Date: 6/7/16

Steve Pfaff, DOE-ORP — Date: 5/26/2016

Glyn Trenchard, DOE-ORP — Date: 5-27-16

Richard Valle, DOE-ORP — Date: 5/25/16

Jason Young, DOE-ORP — Date: 6/2/16

Jeff Lyon, Project Manager,
Washington State Department of Ecology

Date: 6/8/16

See notes on Page 3

Dan McDonald, Project Manager,
Washington State Department of Ecology

Date: 6-8-16

See red tab

Stephanie Schleif, Project Manager,
Washington State Department of Ecology

Date: 6/8/16

See comments on pg 3.

TRI-PARTY AGREEMENT MILESTONE REVIEW AND MONTHLY SUMMARY REPORT

1.0 ADMINISTRATIVE ITEMS/MILESTONE STATUS

Upcoming Meetings

Washington State Department of Ecology (Ecology) and U.S. Department of Energy (DOE) Office of River Protection (ORP) expressed their appreciation to all of the parties for their professionalism during the last year while discussions were limited due to the Consent Decree (CD) litigation. Ecology noted that meetings are already being scheduled regarding information that had been precluded from discussion in the past. Oregon Department of Energy (ODOE) stated that early receipt of the CD monthly summary report was appreciated.

The next project managers meeting is scheduled for June 15, 2016, from 1:00 p.m. to 3:30 p.m. at the ORP office in Richland, Washington. The ORP quarterly milestone review is scheduled for May 19, 2016, from 8:30 a.m. to 11:30 a.m. at the Ecology office in Richland, Washington.

Recent Items Entered/To Be Entered into the Administrative Record

DOE-ORP provided the monthly Tri-Party Agreement (TPA) and CD reports, which will be submitted to the Administrative Record.

Tri-Party Agreement Milestone Status

ORP stated that there were no milestone changes to report, and noted that the status of milestone M-045-84 had been changed to at risk.

Office of River Protection/Washington State Department of Ecology Tri-Party Agreement and Consent Decree Agreements, Issues and Action items – March 2016

The action items were discussed and updated as follows (see agreements, issues and action items table):

Action No. 1 (TF-15-06-01)

Ecology stated that a meeting is scheduled for April 28, 2016 to start discussions regarding Low-Activity Waste Pretreatment System (LAWPS). Ecology suggested that this action could be closed. ORP agreed that the action could be closed. This action was closed.

Action No. 2 (TF-15-10-02)

ORP stated that the intent is to schedule a meeting with Ecology next week, and a flow sheet on the mass and energy balance associated with the Direct Feed Low-Activity Waste (DFLAW) program will be provided. Ecology will provide ORP blocks of times that it is available to meet next week. This action remains open.

Action No. 3 (TF-15-10-03)

ORP stated the goal is to meet with Ecology before the beginning of May 2016. Ecology will provide ORP its availability. Ecology asked if a paper will be provided during the meeting. ORP responded that a paper will be provided during the meeting, along with a discussion. This action remains open.

Action No. 4 (TF-16-01-01)

ORP stated that all of the calculations are ready to deliver to Ecology. This action remains open.

Action No. 5 (TF-16-01-02)

See action No. 2. ORP will schedule a meeting with Ecology for next week. This action remains open.

Action No. 6 (TF-16-01-03)

ORP stated that this action relates to more than just contamination on AX-104 riser 9D, and that it also relates to the soil investigation around AX-104. This action remains open.

Key Documents List

ORP provided an updated key documents list.

2.0 SYSTEM PLAN

ORP stated that there was no change in the text of the TPA monthly summary, and proposed an update to state that discussions with Ecology have started on System Plan 8. ORP added that the intent is to start tracking System Plan 8 in the monthly summary report. ORP noted that a kick-off meeting was held yesterday with Ecology to lay out the overall process for System Plan 8, and that meetings are scheduled every Monday afternoon until System Plan 8 is completed. Ecology stated its understanding that System Plan 7 has not been closed, and asked if System Plan 7 and 8 could be discussed during the meetings. ORP responded that a final letter regarding System Plan 7 was sent to Ecology in July 2015, and that Ecology did not provide a response. ORP indicated that the assumption is System Plan 7 is closed since there was no response from Ecology. ORP added that if Ecology has a different perspective regarding System Plan 7, they should inform ORP and the two system plans could be managed separately. Ecology stated that it would follow up internally regarding the status of System Plan 7.

3.0 ACQUISITION OF NEW FACILITIES

ORP reported that the disputes regarding M-090-13 and M-047-07 have been extended at the request of Ecology. ORP stated that there were no updates to discuss.

4.0 SUPPLEMENTAL TREATMENT AND PART B PERMIT APPLICATIONS

ORP stated that there were no updates to discuss.

5.0 242-A EVAPORATOR STATUS

ORP reported that evaporator campaign-04 (EC-04) was completed last week, and EC-05 is expected to be completed today. Following completion of EC-05, the facility will go into a maintenance outage. The next campaign (EC-06) is scheduled for the August 2016 time frame. ORP noted that the campaign schedule changes according to the tank farm infrastructure and where the waste is located and the volume. ODOE inquired about the waste volume reduction numbers. ORP responded that the estimated waste volume reduction for EC-04 is approximately 259,000 gallons. ORP stated that the estimated waste volume reduction for EC-05 is indeterminate at this time, but it is between 30 to 40,000 gallons. ORP pointed out that the amount for EC-05 represents the tail end of the feed that was available, which is why the numbers are so different. Ecology asked if the numbers include the flush volumes. ORP responded that the numbers are preliminary, and the flush volume calculations will be available in about a week. ORP added that once the numbers are verified, they will be shared with Ecology.

Ecology noted that an integrity assessment is scheduled for later this year, and asked if the integrity assessment plan is available. ORP responded that the status of the integrity assessment activities will be provided to ORP representatives, and when information is provided it will be shared with Ecology. Ecology requested a reference number for the integrity assessment when it is available.

> ***Ecology Request 1: ORP to provide Ecology the reference number for the 242-A Evaporator integrity assessment.***

Ecology asked if there was a reason that the estimated recovery and estimated flush volumes couldn't be included in the monthly summary report and then provide the updated numbers later. ORP responded that the numbers could be discussed, but there is a lot of variability with the numbers, and the final flush volumes are provided rather than a varying set of predictions. ORP added that the results could be included in the monthly summary report after verification.

Note: See discussion under CD regarding the spare reboiler requirement status.

6.0 LIQUID EFFLUENT RETENTION FACILITY/200 AREA EFFLUENT TREATMENT FACILITY

ORP reported that the main treatment train (MTT) recycle was completed in March 2016, and on-the-job staff training was also completed on that system. ORP stated that the Operational Readiness Checklist (ORC) for restart is nearing completion, and ORP is planning to complete its concurrent assessment of the contractor's ORC. ORP reported that the special protective coating was completed in the verification berm area, which is the largest surface area. ORP indicated that a draft Dangerous Waste Permit 8C will be sent to Ecology via email by the end of this week, and Ecology's comments have been incorporated into the draft.

Ecology asked if the readiness assessment is still on schedule to be completed by June 30, 2016. ORP responded that June 30 is ORP's deadline, and the contractor is working to an earlier scheduled completion of the readiness assessment. Ecology asked if April 2016 was the last month for the Environmental Restoration Disposal Facility (ERDF) leachate transfers to the Liquid Effluent Retention Facility (LERF) basins and now will be sent to the 200 West Pump

and Treat Facility. ORP responded that the ERDF leachate transfers should be rerouted to the 200 West Pump and Treat, but the Effluent Treatment Facility (ETF) is still supporting capability of accepting tanker shipments for any miscellaneous reason.

Ecology noted that the numbers for the mixed waste burial trenches 31 and 34 seemed unusually large. ORP responded that the higher number is due to the rainy season. ORP added that the process condensate from the 242-A EC-04 and EC-05 will be sent to basin 42, and it will be reflected in next month's report of about 300,000 gallons. ORP noted that a tour of the LERF/ETF is scheduled with Ecology in May 2016.

7.0 TANK SYSTEM UPDATE

Double-Shell Tank (DST) Integrity - ORP noted that the annulus video inspections are under way for tanks AN-103 and AN-104, and the ultrasonic testing (UT) is being done on AN-105. Ecology noted that there is an interest in tank AY-101, and that a work package is being prepared to do a video inspection of the annulus later this week. Ecology requested a status of the results when they are received. ORP stated that preparations are being made to start the video inspection of AY-101 today.

Single-Shell Tanks (SST) Integrity – ORP reported that four in-tank video inspections have been completed, and the remaining SSTs are on track for in-tank video inspections to be completed by September 2016.

8.0 SINGLE-SHELL TANK INTEGRITY ASSURANCE

ORP stated there were no updates to report on SST integrity milestones.

9.0 IN-TANK CHARACTERIZATION SUMMARY

ORP stated that there were no updates to report for in-tank characterization.

10.0 TANK OPERATIONS CONTRACT OVERVIEW

ORP stated that the current month being reported for the Tank Operations Contract (TOC) overview was for February 2016. ORP noted that a majority of the cost and schedule variances were driven by the additional work to get AY-102 started on time. ORP stated that the unfavorable cost and schedule variances for base operations were due to higher priority work associated with AY-102 and AP-102. ORP noted that the original plan was to use portable exhauster 127, along with the 702-AZ exhaust system, in AY-102. ORP stated that the decision was made to not tie portable 127 into AY-102, which will be reflected in the April data. ORP added that portable exhausters 127 and 126 will be focused on A/AX Tank Farms retrievals.

ORP reported that under work breakdown structure (WBS) 5.02, the unfavorable schedule variance for the current month (February) was associated with higher priority procurements for AY-102 and finish C-111 retrievals. ORP stated that preparations are being made to construct and deploy the third retrieval technology for C-105.

ORP stated that there was some work done under WBS 5.03 in support of the Integrated Disposal Facility (IDF) Performance Assessment (PA) last month. Ecology noted that the

current month unfavorable schedule variance of 65K is below the reporting threshold number, asked about the reporting threshold number. ORP responded that the reporting threshold number is 100K plus one.

ORP stated that one of the drivers for the current month unfavorable schedule variance under WBS 5.5 was associated with receipt of the resin, and that the resin has been received. ORP stated that a baseline change request has been done, and that most of the schedule variance associated with the gas release and retention testing and the filter corrosion testing occurred before the testing was awarded. ORP added that the schedule from the project manager and the awarded contract are being aligned. ORP stated that there should not be any issues associated with the resin once Microbeads is aligned into the schedule. ORP stated that more will be known about the ventilation delays in the June 2016 time frame, and potential impacts to the schedule will be identified. ORP noted that flexibilities were identified during the model review sessions, drawing review support, and the initial design reviews associated with the unfavorable cost variance. ORP added that the review sessions were a three-day effort, and a synopsis will be provided to Ecology during the meeting scheduled for April 28, 2016.

Ecology inquired about ORP's plans going forward to ensure that the resin will be available when needed. ORP responded that it is entering into an arrangement with Microbeads to procure about five years of stock, and the resin procurements will be on an annual basis over the next three to four years. ORP added that a mitigation effort is being directed towards other procurement of beads. ORP noted that those beads may not have as high a performance, but a testing program is being evaluated as well as risk mitigation. Ecology asked if the assumption could be made that the design for the components that require the resin are sufficiently developed and robust enough that there will not be a need to do something different with the resin. ORP responded that it is too early in the process, but it does not appear that changes in design would result, although testing will be needed. Ecology expressed an interest in the alignment between testing and procurement of the resin to ensure it is the correct resin. ORP responded that those topics will be discussed during the monthly meetings, and that areas that Ecology would like to discuss can be identified during the meetings.

ODOE asked about the difference between the resin that has been procured and the resin that was requested. ORP responded that it is the same resin, and that 480 gallons have been shipped to Savannah River that BNI did not want and had procured from Microbeads. ORP stated that the next batch coming in will be about 500 gallons from Microbeads, and next year about 1080 gallons will be procured.

11.0 SINGLE-SHELL TANK CLOSURE AND RETRIEVAL PROGRAM

Closure Program - ORP noted that the annual M-045-56 meeting in July will be M-045-56L. ORP stated that a meeting is scheduled for today to discuss the Resource Conservation and Recovery Act facility investigation (RFI) under M-045-61A. ORP reported that the dispute regarding M-045-82 was extended to May 28, 2016. ORP added that the tier 1 under M-045-82 was submitted to Ecology, and Ecology responded on April 11, 2016 with letter No. 16-NWP-066. ORP pointed out that milestone M-045-83 is to be missed, and M-045-84 is at risk. ORP noted that M-045-92 is in dispute at the Inter-Agency Management Integration Team (IAMIT) level, and has been extended to May 20, 2016.

Ecology requested an explanation in the issues section regarding the change in status to at risk for milestone M-045-84. ORP responded that it will be reported in next month's summary report.

Retrieval Program - ORP stated that when a tank retrieval is completed under the TPA or CD, submittal of a retrieval completion certification is required. Following the retrieval completion certification, sampling occurs under an authorized tank sampling and analysis plan (TSAP), which culminates in a retrieval data report (RDR). The RDR is due a year after the retrieval completion certification. ORP stated that the next RDR will be for C-102, which is due November 30, 2016, and it is anticipated the RDR will be submitted to Ecology in October 2016.

ORP stated that retrieval in C-111was completed, and a meeting was held with Ecology yesterday (4/20/16) to discuss the C-111 sampling. ORP indicated that the RDR sampling for C-111 is planned to start at the end of May 2016.

ORP reported that the Mobile Arm Retrieval System (MARS) vacuum is being utilized in C-105, and the A and C pits will be prepped to install the enhanced reach sluicers, which are on order. ORP stated that a draft tank waste retrieval work plan (TWRWP) for a third retrieval technology in C-105 was submitted to Ecology last week. ORP noted that there is a lot of prep work being done in AX Farm, particularly around AX-102 and AX-104, and the two common diversion boxes that will be used for all of the AX Farm retrievals. Two legacy buildings will be removed from AX Farm, which are the airlift circulator operating building and the condenser building.

12.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

ORP noted that the draft TWRWP for the third retrieval in C-105 was submitted to Ecology last week.

13.0 APPENDIX H STATUS – SINGLE-SHELL TANK WASTE RETRIEVAL CRITERIA

There was no change in status.

14.0 TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

There was no change in status.

CONSENT DECREE MONTHLY SUMMARY REPORT REVIEW

1.0 CONSENT DECREE MILESTONE STATISTICS/STATUS - CONSENT DECREE REPORTS/REVIEWS

ORP stated that the milestones have been updated in accordance with the amended CD, and they are all listed through 2036 in the CD monthly summary report. ORP noted that the CD report will switch from semi-annual reports to quarterly reports. The Department of Justice will have a discussion with the state of Washington Attorney General to determine the due dates for the quarterly CD report.

The reports, agreements, issues, and actions were discussed and updated as follows:

Agreement No. 1

Ecology requested that ORP ensure this agreement goes forward in the quarterly reports. The agreement is to include any DOE written directives to the contractors for work required by the CD.

Action No. 1 (WTP-14-10-01)

ORP stated that engineering studies information was provided to Ecology regarding the temporary melter assembly building. ORP added that the intent is to schedule a meeting with Ecology to provide and discuss the current information. Ecology took an action to determine if there is more information needed or if the information it has needs to be updated. ORP noted that the project is proceeding with procurement actions for the third melter, and a status will be provided when the meeting is scheduled.

Ecology noted that preparing work packages is time-consuming, and expressed an interest in getting work packages done ahead of time. ORP responded that the plan is to prepare the work packages ahead of time. Ecology requested discussions regarding all of the pieces associated with the melter replacement to ensure the parties have a good understanding of the schedule. This action remains open.

Action No. 2 (WTP-14-10-04)

ORP stated that preparations are being made for briefings to Ecology in the next three to four weeks. This action remains open.

Action No. 3 (WTP-14-10-05)

ORP stated that preparations are being made for briefings to Ecology in the next three to four weeks. This action remains open.

Action No. 4 (WTP-14-06-02)

ORP stated that preparations are being made for briefings to Ecology in the next three to four weeks. This action remains open.

Action No. 5 (WTP-14-04-01)

ORP stated that preparations are being made for briefings to Ecology in the next three to four weeks. Ecology indicated that it has provided ORP with clarification on the specific areas it would like included in the briefing. This action remains open.

Action No. 6 (WTP-15-01-01)

ORP stated that preparations are being made for briefings to Ecology in the next three to four weeks. This action remains open.

Action No. 7 (WTP-15-06-01)

ORP stated preparations are being made for briefings to Ecology in the next three to four weeks. This action remains open.

Action No. 8 (WTP-15-06-02)

This action was closed last month on 3/15/16, and it will be removed from the action table.

Action No. 9 (WTP-16-02-01)

ORP stated that preparations are being made for briefings to Ecology in the next three to four weeks. This action remains open.

SPARE REBOILER REQUIREMENT STATUS

ORP reported that the new requirement states that to safeguard against the hypothetical two-year outage, DOE must purchase a spare reboiler by December 31, 2016, and have it available two years later. ORP stated that it has authorized the contractor to proceed with the design and fabrication of the reboiler. ORP added that the contractor is on track to meet the first milestone, which is to have the procurement in place by December 31, 2016. ORP noted that there was no technical data available on the reboiler because it has not reached that stage of design. Ecology inquired about the specifics of the procurement. ORP responded that it means the vendor will be authorized to proceed with designing and fabricating the reboiler.

Ecology inquired about a spare EC-1 condenser, which is another large component. ORP responded that there is a spare EC-1 condenser on site, and a field visit could be arranged for Ecology to view the condenser. Ecology noted that there have been discussions about the time frame of possibly two years to replace a reboiler or the EC-1 condenser, and asked if there has been planning up front for the replacement. ORP responded that planning has been done for the replacement, but the details were not available since it is too far in advance.

2.0 SINGLE-SHELL TANK RETRIEVAL

ORP stated that tanks C-102, C-105 and C-111 were discussed under the TPA portion of today's meeting (see single-shell tank retrieval and closure program). ORP noted that tanks AX-102 and AX-104 will be the first tanks retrieved to complete fourth and fifth tank retrievals by 2020 under milestone D-16B-02. Ecology asked if the five tanks to be completed under D-16B-03

have been identified. ORP responded that the five tanks have been identified as C-102, C-105, C-111, AX-102 and AX-104.

3.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

The CD TWRWP table is identical to the TPA TWRWP table. See discussion under TPA TWRWP status.

4.0 SINGLE-SHELL TANK RETRIEVAL MONTHLY FISCAL YEAR EARNED VALUE MANAGEMENT SYSTEM DATA

ORP stated that the earned value management system (EVMS) data is the same as reported in the TPA portion of today's monthly summary.

5.0 WASTE TREATMENT AND IMMOBILIZATION PLANT PROJECT

ORP stated that since the amended CD was signed, there will be internal discussion to determine what meetings Ecology will be invited to attend. ORP added that it will also discuss with Ecology what meetings would be of value. Ecology expressed appreciation for the professional attitude that was exhibited while the CD was in judicial review and the parties were not able to have open discussions on many topics.

6.0 PRETREATMENT FACILITY

ORP stated the focus in Pretreatment (PT) continues to be technical issue resolution, with the main focus on technical issue 4 (T4) for mixing, mixing vessel testing. ORP pointed out that T1 through T8 are listed in today's monthly summary, but the numbers are different in the amended CD. ORP stated that there are only five technical issues listed in the CD, and the numbering does not match up with the monthly summary report, so ORP will need to determine how to adjust the numbering. Ecology stated that when the status of a milestone is on schedule, it is a fairly vague description. Ecology requested more detailed schedules and in depth information as the parties go forward. ORP responded that it would apply Ecology's request to the quarterly reports since that is the area where the information is required. Ecology agreed with ORP's approach. ORP noted that the milestones have been updated with the amended CD dates, and the ongoing and past due descriptions have been eliminated and all are on schedule.

ORP stated the standard high solids vessel testing on the pulse jet mixer (PJM) vessel is almost complete. The PJM installation is planned for completion in the next three months, and the level instrument testing for PJM was completed.

Ecology asked what is being used to measure the PJM level instrument. ORP responded that it would follow up with Ecology's request.

> ***Ecology Request 1: ORP to provide Ecology the level instrument being used for the PJM testing.***
>
> ***Ecology Request 2: Ecology requested a link for the chemistry study for testing the standardized high solids vessel design testing (SHSVD-T).***

Ecology referred to the significant planned activities in the next three months, and asked if there is adequate funding to keep the initiatives moving forward on the technical issues. ORP responded that there is adequate funding, but there is a funding challenge due to the priority with LAW, Balance of Facilities, and the Analytical LAB (LBL). ORP added that there are ongoing discussions within ORP and Headquarters regarding the funding needed to meet all of the CD milestones. Ecology asked if ORP anticipated a possible need to change some of the scheduling with the technical issues, given the funding profiles. ORP responded that there will be discussions with Headquarters about re-evaluating funding needs. Ecology stated that the SHSVD is one of its main concerns, and asked about the funding availability. ORP responded that funding for SHSVD is a top priority for PT, and the intent is to ensure there is sufficient funding to complete it on time.

Ecology inquired about the erosion/corrosion simulant, noting that it has been discussed for a long period of time. ORP responded that it is planned to be completed in three months, but noted that it has fallen behind due to the focus on vessel testing. ORP added that a meeting was held earlier today regarding erosion/corrosion, and BNI is setting up a workshop with ORP to discuss the details of erosion/corrosion simulant.

7.0 HIGH-LEVEL WASTE FACILITY

ORP stated the key work in the High-Level Waste (HLW) Facility is the high-efficiency particulate air (HEPA) filter testing and design studies, and issue resolution associated with the design and operability (D&O) review. ORP stated that Bechtel completed its probabilistic hazard analysis (PRHA) evaluation associated with the preliminary documented safety analysis (PDSA) update. ORP noted that it participated in Bechtel's internal discussions regarding the PRHA, and that ORP is generally in agreement with the PRHA. ORP will be reviewing the PRHA for the next two to three months. ORP stated that the PRHA is the basis of the PDSA update because it will determine what controls are needed. Ecology asked if ORP anticipates a need for a system retrofit or process flow changes. ORP responded that development of the safety design strategy (SDS) and the SDS gap analysis identified the controls that need to be changed, and that some of the system classifications may need to be revised, but they do not represent significant changes.

ORP referred to the study under way regarding the high-level offgas process (HOP), which is comprised of phase 1 and phase 2. Phase 1 is a review of all the equipment to identify what could be removed or modified. Phase 2 will be a detailed evaluation of the effect on the controls, and modeling will be done to identify how the overall system is improved with the changes. ORP stated that Bechtel is nearing completion of phase 1, and then ORP will be conducting a review in the next two months. ORP added that if it accepts Bechtel's proposal, Ecology will be involved to provide input on ORP's acceptance. Ecology asked if phase 1 results would be provided in summary form. ORP responded that initial results on the key HOP treatment equipment are for the high-efficiency mist eliminator (HEME), the wet electrostatic precipitator electrodes (WESP) vessel, the silver mordenite and the carbon bed adsorber. ORP stated that removal of equipment from the WESP vessel may significantly improve the probability and may not require much of a permit revision. ORP stated that the silver mordenite is currently at a 99.95 percent removal, and if it can be reduced to 99.9 percent, then it does not have to be raised up to a certain high temperature, which would improve the performance and control. ORP stated the catalytic reducer that uses ammonia requires significant additional controls because it is a

major hazard to the facility. Bechtel is considering the possibility of changing the ammonia to urea, which would reduce the hazard to the facility and reduce the controls that are needed.

Ecology asked if the HOP study is just for HLW or if the results would apply to the LAW Facility. ORP responded that it is being considered, but it is not in the current plan or baseline for the LAW Facility, and the intent is to complete the LAW Facility as designed.

ORP reported that the HEPA testing on three of the filters was completed. ORP noted that the three filters were the most robust design, and they passed the testing for the HOP system and the C5 ventilation system (normal and abnormal conditions). ORP stated that testing will be done on the fanless filter for the C2/C3 conditions. ORP noted that the fanless filter failed the C5 conditions, but the C2/C3 conditions require a less robust filter.

ORP stated that the engineering studies for the melter assembly building/airlock and an additional import/export dock are being done to determine whether there is value for the permanent melter assembly building. Ecology requested a copy of the engineering study for review when it is completed. ORP responded that a copy could be provided to Ecology.

8.0 LOW-ACTIVITY WASTE FACILITY

ORP noted that the thermal catalytic oxidizer (TCO), which represents a key procurement, has completed its testing and was delivered onsite and is being temporarily staged at the +48-foot elevation. ORP also noted that the first melter lid was successfully flipped, and work will start on placing the castable refractory in the second melter lid. Ecology asked if the first melter lid will be placed on the melter before work starts on the second melter lid. ORP responded that the intent is to place the lid after it was flipped. Ecology stated that at the appropriate time, it would be helpful to understand the lessons learned from the first melter. ORP stated that there is a significant lessons learned activity under way, particularly in regard to the interactions with the vendor for the design portion, as well as the refractory placement. ORP added that it will follow up to see if anything formal has been put together on the lessons learned from the first melter.

9.0 BALANCE OF FACILITIES

ORP stated that the two major areas of focus in Balance of Facilities (BOF) are energizing Building 87 and working toward site energization. ORP noted that there was a slight delay with procurement of the batteries, which needed to be replaced because energization and charging of those batteries had not been allowed. The new batteries have been received and are being tested. ORP indicated that energization of BOF is geared toward late May to early June 2016. ORP stated that energization will kick off a cascading effect within the startup plan and will provide permanent power to the site. The next step will be to transfer the power to Building 91 and go through the same process to energize Building 91, which provides a power source for the major BOF. ORP stated that there will be walk-downs of the major BOF and engineering evaluations will be done to determine whether there are any risks that could be avoided from the equipment sitting for a long period of time. ORP noted that after Building 87 is energized, activities will roll into startup and component testing of the larger BOF equipment.

ORP stated that the design for the Effluent Management Facility (EMF) is about 45 percent complete, although the number is misleading because there is a lot of information known about the facility and the systems. ORP added that there is an effort under way to finalize some of the

engineering documents to start the procurement process for the EMF, and to also ensure that the documents are properly completed to support the upcoming permit submittals to Ecology. ORP noted that approval of the PDSA for EMF was a significant accomplishment, and it releases the Rev. 0 documentation needed to support the procurements and permit activities.

10.0 ANALYTICAL LABORATORY

ORP stated that the majority of the facilities have been completed in Analytical Laboratory (LAB), and a review has been initiated of the LAB systems needed to support startup testing and Direct Feed Low-Activity Waste (DFLAW) and any modifications that may be needed. ORP stated that the main focus of effort is currently on the test engineer's work station, which will allow preliminary communication systems checks and tests with the BOF components prior to the LAW Annex being available. The LAW Annex will be a primary control point for the remote features of those facilities. The test engineer's work station will be an alternate to the LAW Annex to allow a head start on some of the startup testing.

ORP stated that there is ongoing work on the analytical methods development for LAB, and a majority of the procedures have been developed. ORP added that individual analytical methods are now starting to be developed.

ATTENDEES:

DOE Office of River Protection:

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M. E. Burandt
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T. Z. Gao
S. S. Lowe
J. J. Lyon
J. D. McDonald
S. N. Schleif
M. B. Skorska
K. Wilson

Other:
S. Cimon, Oregon State Department of Energy
J.T. Hamilton, Washington River Protection Solution
R. E. Piippo, Mission Support Alliance/TPA
M. J. Turner, Mission Support Alliance/TPA
K. Knox, Court Reporter

21 April 2016
ORP TPA CD Monthly Meeting

PRINT NAME	SIGN NAME	ORG
Abdul, Wahed		ORP
Alzheimer, Jim		ECY
Barnes, Mike		CY
Beach, Ryan		RP
Biyani, Rabindra		CY
Braswell, Sharon		RP
Bruggeman, Jeff		RP
Burnett, Kaylin W ✓		P
Carter, Justin		VED
Chandran, Nitya		
Cimon, Shelly		ate
Curn, Barry		
Diediker, Janet		
Evans, Rana		
Fletcher, Thomas		
Gao, Tracy		
Grindstaff, Joanne		
Hamilton, James		
Harp, Ben		
Hernandez, Paul		ORP
Higgins, Kathleen		ORP
Huffman, Lori ✓		ORP
Johnson, Jeremy		ORP
Joyner, Jessica		WRPS

Original meeting minutes from 4/21/16 ORP PMM - MT

21 April 2016
ORP TPA CD Monthly Meeting

PRINT NAME	SIGN NAME	ORG
Kemp, Christopher	CJ Kemp	ORP
Knight, Dan		ORP
Knox, Kathy	Kathy Knox	Court Reporter
Lobos, Rod		EPA
Lowe, Steven	Steven Lowe	ECY
Lynch, James		ORP
Lyon, Jeffery		ECY
MacDonald, Dawn ✓	Dawn MacDonald	ORP
Martell, John		DOH
Mathey, Jared		ECY
McDonald, Dan	Dan McDonald	ECY
McNeel, Kliss R		WRPS
Menard, Nina		ECY
Nichols, Stacy ●		ECY
Noonan, Carolyn		MSA
Pfaff, Stephen H		ORP
Piippo, Robert E	Robert Piippo	MSA
Price, John		ECY
Rambo, Jeffrey		ORP
Richardson, John		ECY
Schleif, Stephanie	Stephanie Schleif	ECY
Schmidt, John		DOH
Shuen, Jian-Shun		ORP
Skorska, Maria	Maria Skorska	ECY

21 April 2016
ORP TPA CD Monthly Meeting

PRINT NAME	SIGN NAME	ORG
Smith, Alex		ECY
Stafford, Harold		ORP
Stewart, Dustin		ORP
Trenchard, Glyn		ORP
Trimberger, Bryan		ORP
Turner, Michael ✓		MSA
Utley, Randell		DOH
Valle, Richard		ORP
Varljen, robin		ECY
Walmsley, Mign		ECY
Wang, Oliver S		ECY
Whalen, Cheryl		ECY
Wold, Kristi		ECY
Wrzesinski, Wendell		ORP
Young, Jason		ORP
Mary Bucan dt		ORP
Katie Wilson		ECY
Anne McCartney		ORP

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – April 2016

Agreements:

1. Per an Ecology standing request, ORP agrees to include any written directives given by DOE to the contractors for work required by the CD in future Semi-Annual CD Reports (see CD Section IV-C-1-e, page 8).
2. The ORP and Ecology PMs have developed, signed, and entered an outline for the CD Tank Completion Certification into the TPA Administrative Record. Senior management will continue to be briefed if any follow-on actions arise.

Issues:

1. Ecology has a concern with WTP data being reported exclusively in the CD Monthly Summary Report as the current CD reporting process does not allow Ecology early review time of the CD Monthly Summary Report. ORP and Ecology have raised this concern for discussion at the senior management levels.
2. Ecology disagrees with ORP's letter 15-WSC-0027 and the System Plan.

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – April 2016

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	TF-15-06-01	06/15/15	Ecology would like to be included in future Low-Activity Waste Pretreatment System (LAWPS) work discussions and meetings.	Open		Steve Pfaff/ Janet Diediker	
2	TF-15-10-02	10/15/15	Ecology requests ORP provide information regarding plans and concepts for LERF/ETF to be ready to accommodate Direct Feed Low Activity Waste (DFLAW).	Open		Wendell Wrzesinski	
3	TF-15-10-03	10-15-15	Ecology requests ORP provide information regarding the LERF basin covers, including the target and plan to reduce inventory in the basins.	Open		Richard Valle	
4	TF-16-01-01	1-21-16	Ecology requests DOE provide current LAWPS technical design media to Ecology	Open		Steve Pfaff/ Janet Diediker	
5	TF-16-01-02	1-21-16	Ecology would like DFLAW program interface information to include mass & energy balance and process flow information.	Open		Wendell Wrzesinski	
6	TF-16-01-03	1-21-16	Ecology would like more information on the contamination issue for AX-104 Riser 9D	Open		Ryan Beach	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – April 2016

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	WTP-14-10-01	10/23/14	Ecology requests information on DOE's plans and timeline for the Low Activity Waste (LAW) (replacement) melter assembly building.	Open	An engineering study conducted in 2008 will be provided to Ecology. Additional information on replacements plans will also be provided to Ecology.	Wendell Wrzesinski	
2	WTP-14-10-04	10/23/14	Ecology requests a status update to include a schedule on the 8 technical team issues for High Level Waste (HLW) and Pretreatment (PT).	Open	Completed for HLW.	Dan Knight	
3	WTP-14-10-05	10/23/14	Ecology requests on update on the details of the 2-year work plan for HLW and PT.	Open	Completed for HLW.	Dan Knight	
4	WTP-14-06-02	06/19/14	Ecology requests that DOE provide a presentation on how DOE incorporates, vets, and considers all technical issues (including the Safety Design Strategy).	Open		Joni Grindstaff	
5	WTP-14-04-01	04/22/14	ORP and Ecology have a placeholder action to hold a comprehensive briefing/discussion on the PT efforts.	Open	ORP will follow-up with Ecology to further define and clarify this action so that it can be address and closed.	Joni Grindstaff	
6	WTP-15-01-01	1/22/15	Ecology requests a presentation on standardized high-solids vessel design (SHSVD) to include impacts and optimization in planning area 2, 3, and 4	Open	Impacts will be better understood once the design studies are issued.	Dan Knight	
7	WTP-15-06-01	06/15/15	ORP took an action to provide Ecology a copy of the corrosion simulant basis document.	Open		Dan Knight	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – April 2016

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
8	WTP-15-06-02	06/15/15	Ecology would like to understand how the bounding conditions for the HEPA filters were identified.	Closed	ORP provided a presentation to Ecology on 3/15/16.	Wahed Abdul	3/15/16
9	WTP-16-02-01	2/18/16	Ecology would like to know what design features are left for SHSVD	Open		Dan Knight	

Final

Office of River Protection

Tri-Party Agreement
Monthly Summary Report
April 2016

Office of River Protection (ORP)
Tri-Party Agreement (TPA) Milestone Review
Project Earned Value Management System reflects February 2016 information

Page	Topic	Leads
2	Administrative Items/Milestone Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
4	System Plan	Kaylin Burnett/Jeff Lyon/Dan McDonald
5	Acquisition of New Facilities	Janet Diediker/Jeff Lyon/Dan McDonald
6	Supplemental Treatment and Part B Permit Applications	Steve Pfaff/Jeff Lyon/Dan McDonald
8	242-A Evaporator Status	Paul Hernandez/Jeff Lyon
9	Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility	Richard Valle/ Stephanie Schleif
10	Tank System Update	Dusty Stewart /Jeff Lyon
10	Single-Shell Tank Integrity Assurance	Dusty Stewart / Jim Alzheimer
12	In Tank Characterization and Summary	Dusty Stewart/Michael Barnes
14	Tank Operations Contract Overview	ORP TPA Program Managers/Jeff Lyon
24	Single-Shell Tank Closure Program	Ryan Beach/Jeff Lyon
27	Single-Shell Tank Retrieval Program	Chris Kemp/Jeff Lyon
29	Tank Waste Retrieval Work Plan Status	Chris Kemp/Jeff Lyon
30	Tank in Appendix H, "Status - Single Shell Waste Retrieval Criteria"	Chris Kemp/Jeff Lyon
30	Tank Retrievals with Individual Milestones	Chris Kemp/Jeff Lyon
CD	Waste Treatment and Immobilization Plant (WTP) Overall TPA Summary and Milestone Status; see the U.S. Department of Energy, Office of River Protection Consent Decree 08-5085-FVS Monthly Summary Report for WTP Facility-specific information	Joni Grindstaff/Dan McDonald

Administrative Items/Milestone Status

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2015				
M-062-45-T01	Comp. Neg's 6-Mo After Last Issuance of System Plan	04/30/2015		In Dispute
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		In Dispute
M-062-45-ZZ-A	Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones	04/30/2015		In Dispute
M-045-92	Barrier 3 Design/Monitoring Approval From Ecology	06/30/2015		In Dispute
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		In Dispute
M-045-91E1	Provide SST Farms Dome Deflection Surveys Every Two Years.	09/30/2015	9/21/15	Complete
Fiscal Year 2016				
M-045-92N	Construct Barriers 1 and 2 in 241-SX Farm	10/31/2015		In Dispute
M-062-01AF	Submit Semi-Annual Project Compliance Report	01/31/2016	01/29/2016	Complete
M-047-07	CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology	03/31/2016		In Dispute
M-090-13	CD-1 for Interim Hanford Storage Project and CR for CD-2 to Ecology	03/31/2016		In Dispute
M-062-31-T01	Comp. Final Design & Submit RCRA Part B Permit Mod Request for Enhanced WTP & Supplemental Treatment	04/30/2016		In Dispute
M-045-92Q	Submit Barrier 4 Design/Monitoring Plan	06/30/2016		In Dispute
M-062-01AG	Submit Semi-Annual Project Compliance Report	07/31/2016		On Schedule
M-045-56L	Ecology And DOE Agree, At A Minimum, To Meet Yearly (By July)	07/31/2016		On Schedule
Fiscal Year 2017				
M-045-92P	Barrier 3 Construction Complete	10/31/2016		In Dispute
M-062-40E	Select a Minimum of Three Scenario's	10/31/2016		On Schedule
M-045-61A	Submit to Ecology a primary doc. Phase 2 CMS and Rev. O update to the RFI Report for WMA-C	12/31/2016		On Schedule
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	Six months after CMS approval (M-045-61A)		On Schedule
M-045-84	Comp Neg's of HFFACO Interim Milestones for Closure of 2nd SST WMA	01/31/2017		At Risk

Milestone	Title	Due Date	Completion Date	Status
M-062-01AH	Submit Semi-Annual Project Compliance Report	01/31/2017		On Schedule
M-062-01AI	Submit Semi-Annual Project Compliance Report	07/31/2017		On Schedule
M-045-91E2	Provide SST Farms Dome Deflection Surveys' Every Two Years	09/30/2017		On Schedule

CD-1/-2 = critical decision-1/-2.
CMD = current measuring device.
CMS = current measures study.
CR = change request.
DOE = U.S. Department of Energy.
Ecology = Washington State Department of Ecology.
HFFACO = *Hanford Federal Facility Agreement and Consent Order.*
RCRA = *Resource Conservation and Recovery Act.*
RFI = RCRA Facility Investigation.
SST = single-shell tank.
TBD = to be determined.
WTP = Waste Treatment and Immobilization Plant.
WMA = Waste Management Area.

System Plan

Significant Past Accomplishments:

1. On October 24, 2013, Washington State Department of Ecology (Ecology) and U.S. Department of Energy (DOE), Office of River Protection (ORP) signed the Tri-Party Agreement (TPA) Change Control Form M-62-13-02, moving out the due date for this embedded milestone from October 31, 2013 to December 15, 2013, for selection of three, or more, scenarios to be modeled in the ORP-11242, *River Protection Project System Plan*, Rev. 7 (System Plan 7).
2. Ecology defined five scenarios to be analyzed in System Plan 7. Washington River Protection Solutions LLC (WRPS) included a description of each scenario in the *Selected Scenarios for the River Protection Project System Plan*, Rev. 7 document released to ORP on December 4, 2013. See joint ORP and Ecology letter 13-TPD-0070, "Completion of Hanford Federal Facility Agreement and Consent Order Milestone M-062-40C, to select a Minimum of Three Scenarios and Partial Completion of Milestone M-062-40," dated December 12, 2013, for completion and description of M-062-40C scenarios.
3. Detailed assumption review was completed and has been approved by Ecology.
4. On February 11, 2014, ORP transmitted a letter (14-TPD-0003, "Contract No. DE-AC27-08RV14800 – Approval to use Washington State Department of Ecology's Appendix B, "Key Assumptions and Success Criteria" for the ORP-11242, *River Protection Project System Plan*, Rev. 7") to WRPS in response to letter WRPS-1400313, "One System – Washington River Protection Solutions LLC Transmits to the U.S. Department of Energy, Office of River Protection for Approval, Appendix B Key Assumptions and Success Criteria for the River Protection Project System Plan, Revision 7, in Support of Contract Deliverable C.2.3.1 -1, River Protection Project System Plan," to approve the use of Ecology's Appendix B, "Key Assumptions and Success Criteria," for System Plan 7.
5. On February 13, 2014 Ecology presented the five selected scenarios to the Hanford Advisory Board Tank Waste Committee.
6. Ecology, ORP, and WRPS reviewed and provided comments for Sections 1.0 and 2.0 of System Plan 7 during the week of February 17, 2014.
7. Ecology, ORP and WRPS reviewed and provided comments for Section 3.0 of the System Plan 7 during the week of March 21, 2014.
8. Ecology, ORP and WRPS reviewed and provided comments for Appendix C, "Modeling Tools," of the System Plan 7 during the week of April 1, 2014.
9. During the week of April 28, 2014, WRPS and ORP facilitated meetings for Ecology to define detail spending assumptions for Case 5.
10. On July 29, 2014, WRPS case authors presented the results of the five cases to Ecology and ORP.
11. System Plan 7 was reviewed, all comments resolved, and comments incorporated into the document.

12. On October 31, 2014, ORP transmitted System Plan 7 to Ecology.
13. ORP received Ecology's January 14, 2015, transmitted letter 15-NWP-004, "Department of Ecology Review of the *River Protection Project System Plan*, ORP-11242, Revision 7," regarding Ecology's review of System Plan 7.
14. ORP met with Ecology at the Tank Farms TPA and Consent Decree (CD) monthly status meeting on February 25, 2015.
15. ORP transmitted letter 15-WSC-0027, "Washington State Department of Ecology Review of ORP-11242, *River Protection System Plan, Rev. 7*, 15-NWP-004, January 14, 2015," in response to Ecology's letter 15-NWP-004 to Ecology on June 2, 2015. ORP's letter provided clarification and several attachments of additional information requested in Ecology's January 14, 2015, letter.

Significant Planned Actions in the Next Six Months:

- Scenario selection discussions will be conducted to support M-062-40E, Due: October 31, 2016

Issues: None.

Acquisition of New Facilities

M-090-13, Submit Critical Decision-1 for Interim Hanford Storage Project and TPA Change Request for CD-2 to Ecology, Due: March 31, 2016, Status: In dispute. Change control form M-90-15-01 was submitted by ORP to Ecology for approval on December 30, 2015. This dispute has been extended to May 20, 2016.

M-090-00, Acquire/Modify Facilities for Storage of Immobilized High-Level Waste (IHLW), Due: December 31, 2019, Status: On schedule.

M-047-07, Submit CD-1 for Secondary Liquid Waste Treatment and Change Request (CR) for CD-2 to Ecology, Due: March 31, 2016, Status: In dispute. Change control form M-47-15-01 was submitted by ORP to Ecology for approval on December 30, 2015. This dispute has been extended to May 20, 2016.

M-047-00, Complete Work Necessary to Provide Facilities for Management of Secondary Waste from the Waste Treatment and Immobilization Plant (WTP), Due: December 31, 2022, Status: On schedule.

Significant Past Accomplishments: None.

Significant Planned Actions in the Next Six Months: None.

Issues: None.

Supplemental Treatment and Part B Permit Applications

M-062-45ZZ (designation for M-062-45 item 3), Negotiate a one-time supplemental treatment selection, Due: April 30, 2015, Status: In dispute.

M-062-45ZZ-A, Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones, Due: April 30, 2015, Status: In dispute.

M-062-31-T01, Complete final design and submit Resource Conservation and Recovery Act Part B permit modification request, Due: April 30, 2016, Status: In dispute.

M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: April 30, 2018, Status: In dispute.

M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: April 30, 2021, Status: In dispute.

M-062-45-T01, Every six years, within six months after last revision of the System Plan, negotiate tank waste retrieval sequencing, Due: April 30, 2015, Status: In Dispute.

M-062-45XX, No later than December 31, 2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, Due: December 31, 2021, Status: On schedule.

M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due: December 30, 2022, Status: In dispute.

M-062-21, Annually submit data that demonstrates operation of the WTP, Due: February 28, 2023, Status: On schedule.

M-062-00, Complete Pretreatment Processing and Vitrification of High-Level Waste and LAW Tank Wastes, Due: December 31, 2047, Status: On schedule.

Significant Past Accomplishments:

*Per ORP letter 14-TF-0052, "Documentation of U.S. Department of Energy, Office of River Protection and Washington State Department of Ecology Agreement that the Office of River Protection will not Submit A One-Time Hanford Tank Waste Supplemental Treatment Technologies Report," signed by ORP on May 6, 2014, and provided to Ecology on May 7, 2014, ORP documented the ORP/Ecology discussions for the *One-Time Hanford Tank Waste Supplemental Treatment Technologies Report* and that ORP does not intend to submit this report. ORP received Ecology's response letter, 14-NWP-110, "Acknowledgement that the U.S. Department of Energy, Office of River Protection Will Not Submit a One-Time Supplemental Treatment Technologies Report," on May 29, 2014. ORP letter 14-TF-0088, "Hanford Federal Facilities Agreement and Consent Order Class II Change Request for Deletion

of Tri-Party Agreement Milestone M-062-40ZZ, One-Time Hanford Tank Waste Supplemental Treatment Technologies Report," dated and delivered to Ecology on July 31, 2014, submitted a signed TPA change package to delete the requirement of the *One-Time Hanford Tank Waste Supplemental Treatment Technologies Report* from TPA Milestone M-062-40. Ecology signed TPA Change Package M-62-14-01 deleting M-062-40ZZ on August 12, 2014.

Significant Planned Actions in the Next Six Months: None.

Issues:

On January 30, 2015, ORP provided Ecology Change Control Form M-62-14-02, which proposed adding language under TPA Milestone M-062-45 to defer negotiations required under M-062-45. Ecology did not respond with the 14-day review period that ended February 13, 2015 which is deemed disapproval in accordance with the TPA. In letter 15-TF-0014, "Initiation of Dispute Resolution Regarding Disapproval of Hanford Federal Facility Agreement and Consent Order Change Control Form M-62-14-02,"dated February 20, 2015, ORP initiated a dispute resolution. Ecology provided a justification for their disapproval on March 12, 2015 via letter 15-NWP-036, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Change Package, Change Number M-62-14-02, dated 01/30/2015." Ecology and ORP signed an extension of the dispute resolution period at the TPA project manager level until May 20, 2016.

242-A Evaporator Status

(previously reported under Milestone M-48, which has been closed out)

The 242-A Evaporator campaign strategy for fiscal year (FY) 2015 through fourth quarter of FY 2016 depicted in the following table:

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY 2015	EC-01	AP-103 AP-104	AP-107	Campaign and flush activities completed on June 21, 2015.
FY 2015	EC-02	AZ-102	AP-103	Completed July 21, 2015.
FY 2015	EC-03	AZ-102	AP-103	Completed September 25, 2015.
FY 2016	EC-04	AP-104	AP-103	Estimated to begin third quarter FY 2016.
FY 2016	EC-05	AP-104	AP-104	Estimated to begin third quarter FY 2016.
FY 2016	EC-06	AY-101	AP-104	Estimated to begin fourth quarter FY 2016.

FY = fiscal year.

Significant Planned Actions in the Next Six Months:

- Future campaign and outage scheduling
- 242-A Evaporator instrument calibrations and preventive maintenance
- Electrical preventative maintenance activities in 241-AW and 242-A
- Control room upgrades at 242-A Evaporator

Issues: None.

Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility

Status:

The Liquid Effluent Retention Facility (LERF) liquid levels, inventory, and received waste is shown in the table below for the time period of March 1 through 31, 2016.

Note: Volumes in this table are estimated. Tanker shipment volumes are estimated by multiplying the number of shipments by the capacity of the tanker being used.

	242AL-42 (Basin 42)	242AL-43 (Basin 43)	242AL-44 (Basin 44)
Volume (as of 03/31/16)	~4.89 Mgal	~7.15 Mgal	~6.68 Mgal
AZ-301 Tanker Shipments	-	-	-
MWBT-31 and 34 Leachate	-	-	~70,000 gal
Perched Water Tanker Shipments	-	-	-
ERDF Leachate Transfers	-	279,000 gal	-
ERDF Leachate Tanker Shipments			~21000 gal
Other (325 Building Totes)	-		~1300 gal-

ERDF = Environmental Restoration Disposal Facility.
Gal = gallon.
Mgal = million gallons.
MWBT = mixed waste burial trench.

Significant Planned Actions in the Next Six Months:

- Staff training, component and system testing, and readiness activities for Effluent Treatment Facility (ETF) are ongoing and expected to be completed in third quarter of FY 2016.
- Berm special protective coating of specific areas at ETF and LERF are ongoing and expected to be completed in third quarter of FY 2016.
- Hanford Dangerous Waste Permit 8C, Operation Unit Group -3, class 1 prime modifications package submittal in third quarter.
- Processing waste from LERF through ETF scheduled for third and fourth quarters of FY 2016.

Issues: None.

Tank System Update

Significant Planned Actions in FY 2016:

~~Strikethrough~~ means completed to date

Double Shell Tank (DST) Integrity

- Enhanced annulus video inspection:
  - ~~241-AN-101~~ (complete)
  - 241-AN-103
  - 241-AN-104
  - 241-AN-105
  - 241-AN-106
  - 241-AW-103
  - 241-AW-106
  - 241-SY-101
  - 241-SY-102
  - 241-SY-103
- Ultrasonic testing (UT) inspections (two risers for primary wall/welds, one riser for secondary floor):
  - 241-AN-105 (this inspection is in process, finish date May 5, 2016)
  - 241-AW-103
- Continuing bi-weekly inspections of AY-102 waste accumulation site
- Continuing bi-monthly comprehensive inspection of AY-102 annulus
- Revise and update RPP-7574, *Double-Shell Tank Integrity Project Plan*
- Released the DST independent qualified registered professional engineer (IQRPE) integrity assessment report (RPP-RPT-58441) per WAC 173-303-640(2), "Tank systems".

Single Shell Tanks (SST) Integrity

- In-tank video inspections:
  - ~~241-T-107~~ (complete)
  - ~~241-T-110~~ (complete)
  - 241-TX-103
  - 241-TX-111
  - 241-TX-113
  - 241-TX-116
  - ~~241-B-101~~ (complete)
  - ~~241-B-201~~ (complete)
  - 241-BY-105
  - 241-U-102
  - 241-U-105
  - 241-U-107.

- Intrusions mitigation (M45-56):
  - Complete 241-T-111

NOTE: In the 2015 Annual Meeting between ORP and Ecology to discuss interim measures a commitment was made to provide a report evaluating T-111 ventilation system performance at the end of system operation with a due date of April 30, 2016. The T-111 exhauster continues to work and is not at the end of system operation. Therefore, it is recommended that a discussion be had between the program managers for ORP and Ecology to work together to obtain a new due date for the submittal of the April 30, 2016 report. Navigate to the meeting notes for the 2015 annual meeting using the following link, http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0080444H Scroll to page 3 of the document, number 4 of the "Actions Proposed for FY 2016".

  - Work is initiated on subsequent tank 241-T-112

Single-Shell Tank Integrity Assurance

M-045-91I, Provide to Ecology an Independent, Qualified, Registered Professional Engineer (IQRPE) certification of single-shell tanks (SST) structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: September 30, 2018, Status: On schedule.

Significant Past Accomplishments: None

Significant Planned Actions in the Next Six Months:

- Continue planning for the SST integrity assessment by an IQRPE (M-045-91I).

Issues: None.

In Tank Characterization and Summary

For the period from March 1 through March 31, 2016:

Accomplishments:

- Completed RPP-RPT-49876, *Derivation of Best-Basis Inventory for Tank 241-C-110 as of January 1, 2016*, Rev 3.
- Completed RPP-RPT-44814, *Derivation of Best-Basis Inventory for Tank 241-AN-101 as of January 1, 2016*, Rev 20.
- Completed RPP-RPT-59035, *Derivation of Best-Basis Inventory for Tank 241-B-105 as of January 1, 2016*, Rev 0.
- Completed RPP-RPT-59036, *Derivation of Best-Basis Inventory for Tank 241-B-110 as of January 1, 2016*, Rev 0.
- Completed RPP-RPT-58857, *Derivation of Best-Basis Inventory for Tank 241-A-104 as of February 1, 2016*, Rev 1.
- Completed RPP-RPT-59037, *Derivation of Best-Basis Inventory for Tank 241-B-112 as of January 1, 2016*, Rev 0.
- Completed RPP-RPT-58699, *Derivation of Best-Basis Inventory for Tank 241-TX-108 as of October 1, 2015*, Rev 1.
- Completed RPP-RPT-44752, *Derivation of Best-Basis Inventory for Tank 241-BY-103 as of January 1, 2016*, Rev 2.
- Completed RPP-RPT-48103, *Derivation of Best-Basis Inventory for Tank 241-AP-107 as of February 1, 2016*, Rev 7.
- Completed RPP-RPT-57458, *Derivation of Best-Basis Inventory for Tank 241-C-102 as of January 1, 2016*, Rev 5.
- Completed RPP-RPT-56866, *Derivation of Best-Basis Inventory for Tank 241-A-103 as of January 1, 2016*, Rev 1.
- Completed RPP-RPT-58447, *Derivation of Best-Basis Inventory for Tank 241-A-102 as of March 1, 2016*, Rev 1.
- Completed RPP-RPT-44643, *Derivation of Best-Basis Inventory for Tank 241-SY-102 as of January 1, 2016*, Rev 5.
- Completed RPP-PLAN-60723, *Sampling and Analysis Plan for the Effluent Treatment Facility, Liquid Effluent Retention Facility, and Treated Effluent Disposal Facility*, Rev 0.
- Completed RPP-19849, *Sampling and Analysis Plan for Evaporator Slurry*, Rev 5.
- Completed RPP-PLAN-575353, *Sampling and Analysis Plan for 242-A Evaporator Process Condensate*, Rev 3.
- Completed HNF-EP-0182, *Waste Tank Summary Report for Month Ending January 31, 2015*, Rev 337.
- Completed RPP-CALC-60803, *242-A Evaporator Campaign EC-04 Process Control Plan Calculations*, Rev 0.

- Completed RPP-CALC-60596, *Tank 241-AP-107 FY16 Q2 Process Knowledge Concentration Vector Calculations*, Rev 2.
- RPP-RPT-59189, *Final Analytical Report for Tank 241-AP-104 Grab Samples in Support of Evaporator Campaigns EC-04 and EC-05,* Rev 0, was released.
- RPP-RPT-59213, *Final Report for AZ-301 Catch Tank Liquid Samples, January 2016,* Rev 0, was released.
- Completed 241-C-102 ERSS/clam shell sampling March 16, 2016. Three samples were received at the laboratory.
- Completed 241-AY-101 grab sampling March 31, 2016. Thirteen samples were received at the laboratory.

Planned Action within the Next Six Months:

Tank sampling:

- Tank 241-AP-107 core sampling is planned to begin April 2016.
- Tank 241-AP-107 grab sampling is planned to begin April 2016
- Tank 241-AP-102 grab sampling in support of AY-102 retrieval is planned for June 2016.
- Tank 241-AN-101 grab sampling at completion of C-111 hard heel retrieval is planned for July 2016.
- Tank 241-C-111 Off-Riser Sampling System (ORSS) closure sampling is planned for July 2016.
- Tank 241-AW-103 grab sampling is planned for August 2016.

Best-Basis Inventory (BBI) updates:

BBI updates for the following tanks were completed in March 2016:

- 241-A-102
- 241-A-103
- 241-A-104
- 241-B-105
- 241-B-110
- 241-B-112
- 241-AN-101
- 241-AP-107
- 241-BY-103
- 241-C-102
- 241-C-110
- 241-SY-102
- 241-TX-108

BBI updates for the following tanks currently are planned to be completed in April 2016:

- 241-AZ-102
- 241-S-111
- 241-SX-106

Data Quality Objectives (DQO):

- RPP-8532, *Double-Shell Tanks Chemistry Control Data Quality Objectives,* Rev 15, is in-process to identify additional analyses for corrosion mitigation and to simplify quality control parameters is planned to be released in April 2016.

Issues: None

Tank Operations Contract Overview

Project Performance

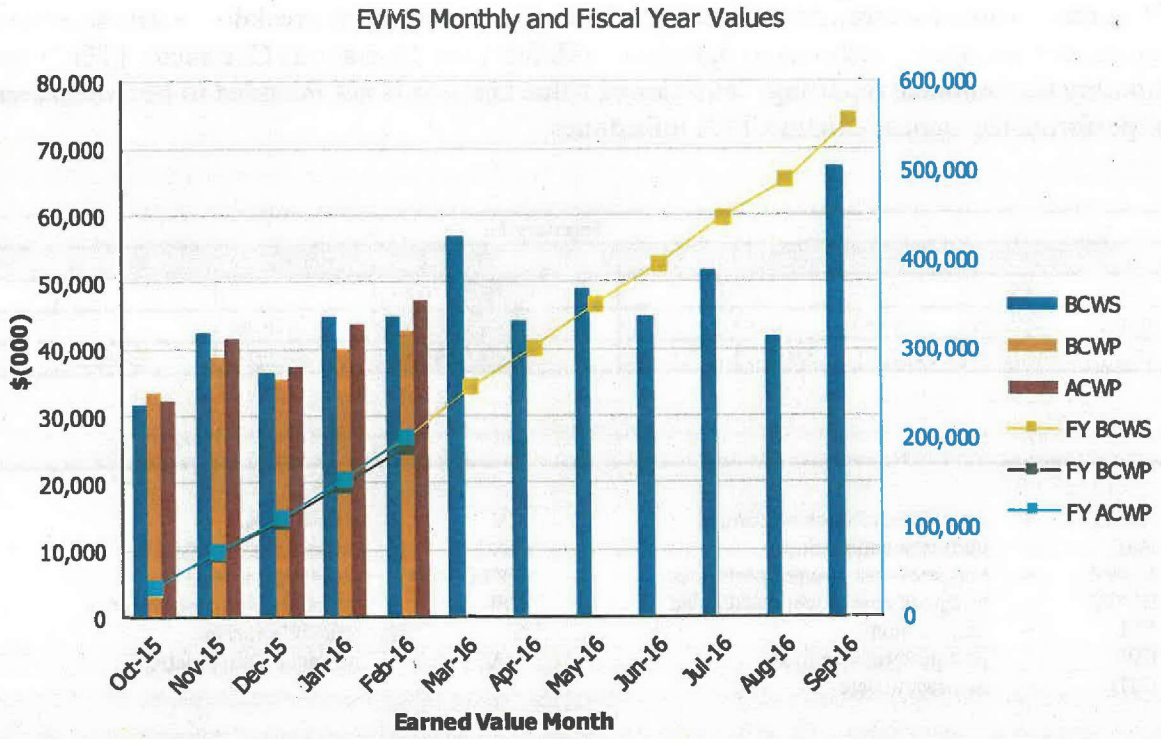
The earned value performance reporting reflects the format, work breakdown structure reporting levels, and variance thresholds as agreed to with the Tank Operations Contractor (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing TPA milestones.

February-16										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	44,951	42,790	47,389	(2,161)	(4,598)	0.95	0.90			
FYTD	200,498	190,963	202,058	(9,535)	(11,095)	0.95	0.95	556,261		
CTD	3,051,338	3,022,216	3,026,736	(29,122)	(4,520)	0.99	1.00	3,419,281	3,443,828	(24,548)

ACWP	=	actual cost of work performed.	CV	=	cost variance.
BAC	=	budget at completion.	EAC	=	estimate at completion.
BCWP	=	budgeted cost of work performed.	FYTD	=	fiscal year to date
BCWS	=	budgeted cost of work scheduled.	SPI	=	schedule performance index.
CM	=	current month	SV	=	schedule variance.
CPI	=	cost performance index.	VAC	=	variance at completion.
CTD	=	contract to date			

Earned Value Data: Fiscal Year 2016 February-16

Tank Farms ORP-0014



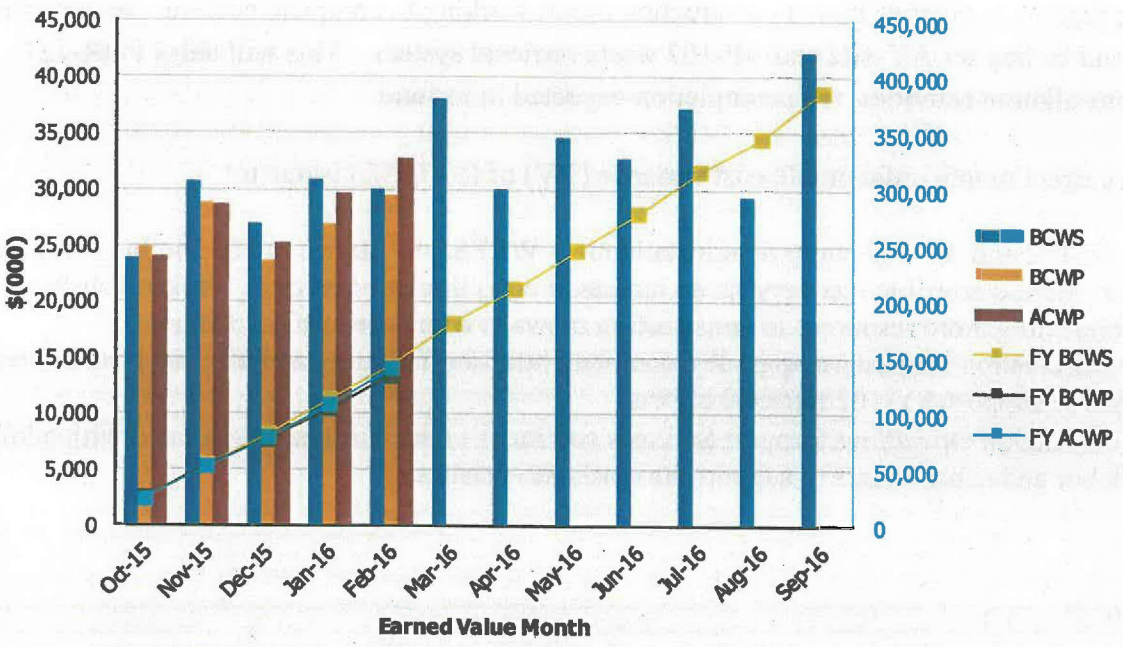
Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$31,724	$33,377	$32,188	1.05	1.04	$31,724	$33,377	$32,188	1.05	1.04
Nov 2015	$42,325	$38,998	$41,461	0.92	0.94	$74,049	$72,376	$73,649	0.98	0.98
Dec 2015	$36,530	$35,614	$37,416	0.97	0.95	$110,579	$107,990	$111,065	0.98	0.97
Jan 2016	$44,968	$40,183	$43,604	0.89	0.92	$155,547	$148,173	$154,669	0.95	0.96
Feb 2016	$44,951	$42,790	$47,389	0.95	0.90	$200,498	$190,963	$202,058	0.95	0.95
Mar 2016	$56,813					$257,311				
Apr 2016	$44,225					$301,536				
May 2016	$49,019					$350,556				
Jun 2016	$44,835					$395,390				
Jul 2016	$51,866					$447,256				
Aug 2016	$41,829					$489,086				
Sep 2016	$67,175					$556,261				
CTD	$3,051,338	$3,022,216	$3,026,736	0.99	1.00					

ACWP	=	actual cost of work performed.	CTD	=	contract to date
BCWP	=	budgeted cost of work performed.	EVMS	=	Earned Value Management System.
BCWS	=	budgeted cost of work scheduled.	FY	=	fiscal year.
CPI	=	cost performance index.	SPI	=	schedule performance index

Earned Value Data: Fiscal Year 2016 February-16

Tank Farms ORP-0014
Base Operations 5.01

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$23,768	$24,839	$24,025	1.05	1.03	$23,768	$24,839	$24,025	1.05	1.03
Nov 2015	$30,658	$28,752	$28,562	0.94	1.01	$54,426	$53,592	$52,587	0.98	1.02
Dec 2015	$26,911	$23,637	$25,173	0.88	0.94	$81,336	$77,229	$77,760	0.95	0.99
Jan 2016	$30,829	$26,913	$29,740	0.87	0.90	$112,165	$104,142	$107,500	0.93	0.97
Feb 2016	$29,963	$29,524	$32,689	0.99	0.90	$142,128	$133,666	$140,189	0.94	0.95
Mar 2016	$38,132					$180,260				
Apr 2016	$29,930					$210,190				
May 2016	$34,689					$244,879				
Jun 2016	$32,729					$277,609				
Jul 2016	$37,169					$314,778				
Aug 2016	$29,277					$344,055				
Sep 2016	$42,255					$386,310				
CTD	$2,034,012	$2,015,879	$2,014,018	0.99	1.00					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date
EVMS = Earned Value Management System.
FY = fiscal year.
SPI = schedule performance index

Base Operations and Tank Farm Projects

The current month unfavorable schedule variance (SV) of ($438K) is due to:

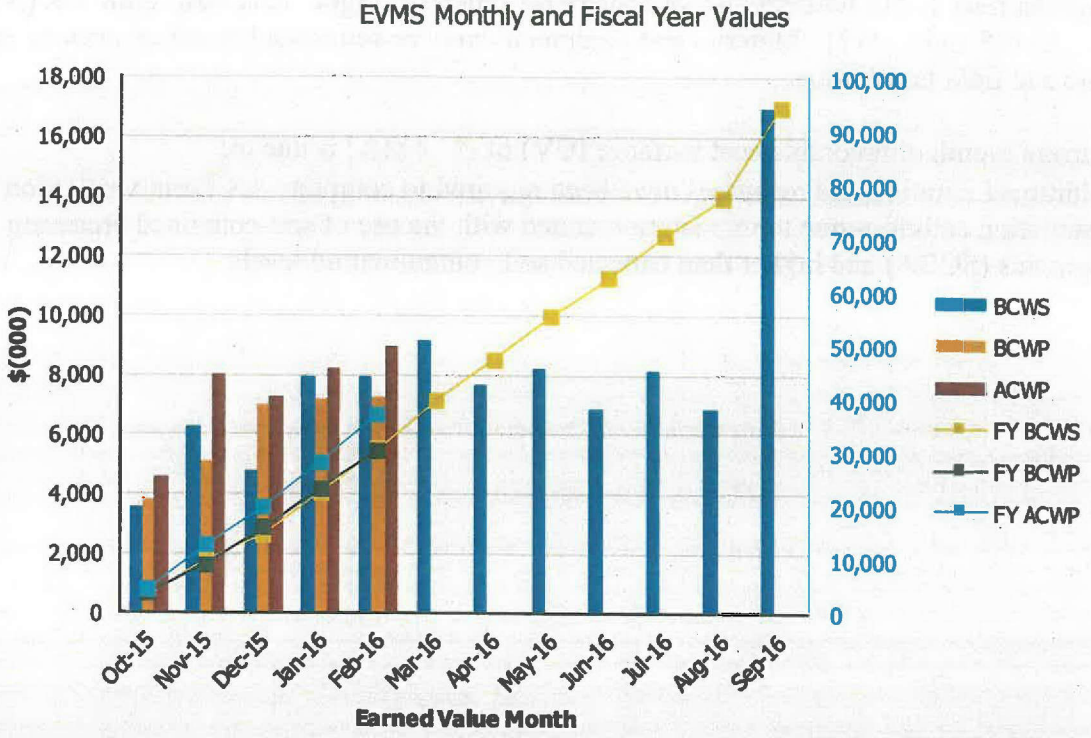
- AY-102 Tie-In to portable exhauster (POR)-127 - Procuring materials and fabrication did not progress as planned due to construction crews working to complete construction activities and testing for AY-102 and AP-102 waste retrieval system. This will delay POR-127 installation activities, with completion expected in in June.

The current month unfavorable cost variance (CV) of ($3,165K) is due to:

- AY-102 and AP-102 equipment installation – WRPS and American Electric Inc continued to accelerate schedule recovery (at an increased cost) through overtime, weekend shifts and allocating more resources to construction crews to complete testing, continue recirculation/ventilation upgrades, complete inter-farm lighting and electrical transformer tie-ins to support AY-102 retrieval efforts.
- Production Operations Support Services continues to have impacts associated with additional labor and subcontracts to support the mask issue stations.

Earned Value Data: Fiscal Year 2016 February-16

Tank Farms ORP-0014
Retrieve and Close SST's 5.02



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$3,557	$3,814	$4,560	1.07	0.84	$3,557	$3,814	$4,560	1.07	0.84
Nov 2015	$6,282	$5,131	$8,006	0.82	0.64	$9,839	$8,946	$12,566	0.91	0.71
Dec 2015	$4,769	$6,970	$7,255	1.46	0.96	$14,608	$15,915	$19,821	1.09	0.80
Jan 2016	$7,914	$7,214	$8,233	0.91	0.88	$22,522	$23,130	$28,053	1.03	0.82
Feb 2016	$7,948	$7,288	$8,959	0.92	0.81	$30,470	$30,417	$37,012	1.00	0.82
Mar 2016	$9,130					$39,600				
Apr 2016	$7,648					$47,248				
May 2016	$8,210					$55,458				
Jun 2016	$6,890					$62,348				
Jul 2016	$8,126					$70,474				
Aug 2016	$6,834					$77,307				
Sep 2016	$16,966					$94,273				
CTD	$622,948	$615,644	$646,984	0.99	0.95					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date
EVMS = Earned Value Management System.
FY = fiscal year.
SPI = schedule performance index

Retrieve and Close Single Shell Tanks

The current month unfavorable schedule variance (SV) of ($660K) is due to:

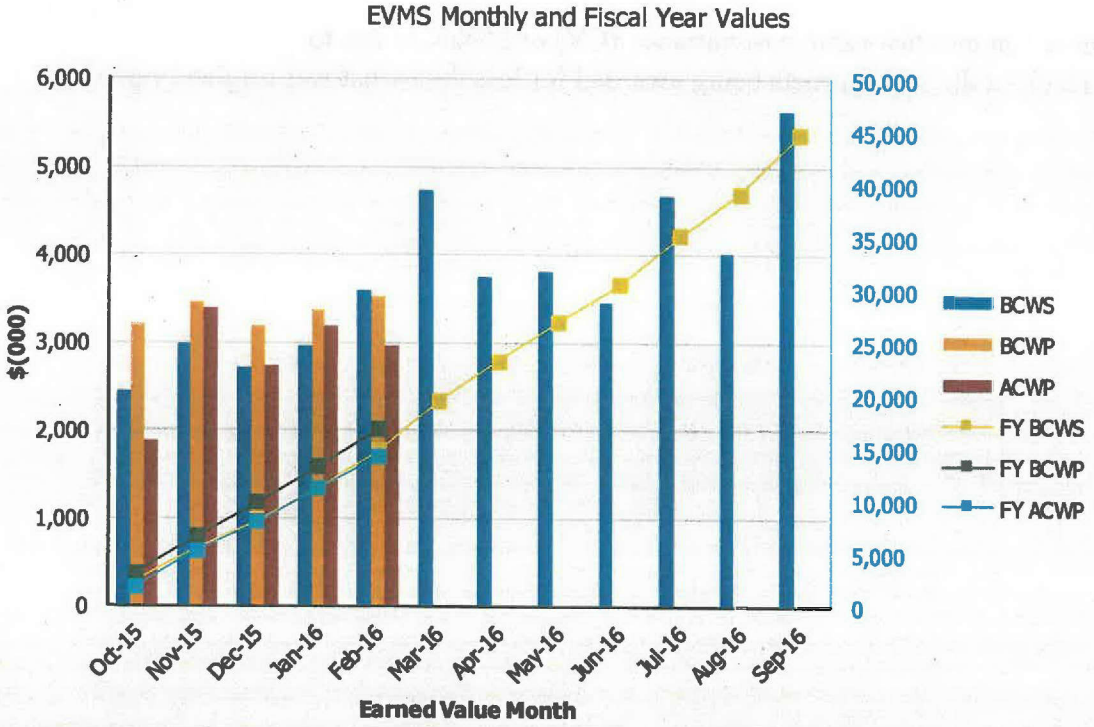
- AX Farm procurements (extended reach sluicer system [ERSS], demister water supply) were re-prioritized due to funding/budget constraints related to higher tank farm priorities (AY-102, C-105 and C-111). Material and equipment were re-sequenced based on priority, lead time and field installation.

The current month unfavorable cost variance (CV) of ($1,671K) is due to:

- Additional duration and resources have been required to complete AX Farm ventilation installation activities due to impacts associated with the use of self-contained breathing apparatus (SCBA) and higher than expected soil contamination levels.

Earned Value Data: Fiscal Year 2016 February-16

Tank Farms ORP-0014
Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure 5.03



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$2,434	$3,210	$1,876	1.32	1.71	$2,434	$3,210	$1,876	1.32	1.71
Nov 2015	$2,987	$3,446	$3,379	1.15	1.02	$5,421	$6,656	$5,255	1.23	1.27
Dec 2015	$2,714	$3,193	$2,743	1.18	1.16	$8,134	$9,849	$7,998	1.21	1.23
Jan 2016	$2,966	$3,366	$3,180	1.13	1.06	$11,101	$13,215	$11,178	1.19	1.18
Feb 2016	$3,583	$3,518	$2,966	0.98	1.19	$14,683	$16,733	$14,144	1.14	1.18
Mar 2016	$4,740					$19,424				
Apr 2016	$3,751					$23,174				
May 2016	$3,809					$26,983				
Jun 2016	$3,454					$30,437				
Jul 2016	$4,666					$35,103				
Aug 2016	$4,012					$39,115				
Sep 2016	$5,629					$44,744				
CTD	$343,355	$343,009	$319,227	1.00	1.07					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date
EVMS = Earned Value Management System.
FY = fiscal year.
SPI = schedule performance index

Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure

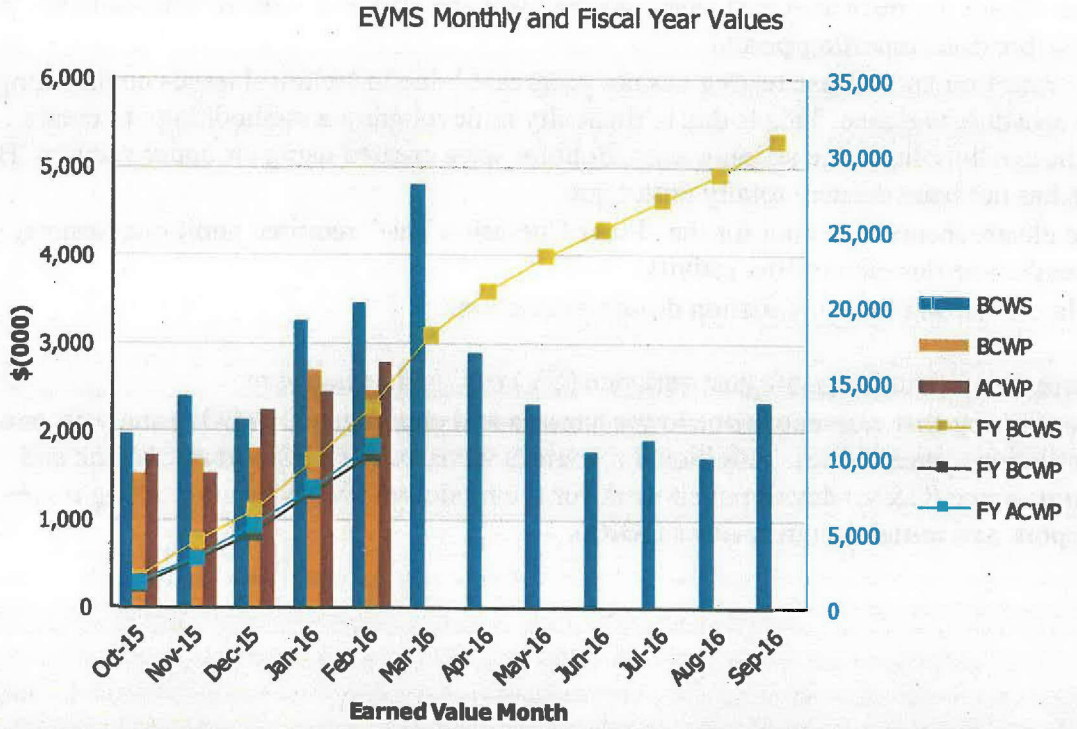
The current month unfavorable schedule variance (SV) of ($65K) is below the reporting threshold and does not require a variance narrative.

The current month favorable cost variance (CV) of $552K is due to:

- A result of the subcontracts being awarded for less than what was originally planned.

Earned Value Data: Fiscal Year 2016 February-16

Tank Farms ORP-0014
Treat Waste 5.5



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$1,965	$1,513	$1,735	0.77	0.87	$1,965	$1,513	$1,735	0.77	0.87
Nov 2015	$2,399	$1,669	$1,517	0.70	1.10	$4,364	$3,182	$3,252	0.73	0.98
Dec 2015	$2,137	$1,814	$2,245	0.85	0.81	$6,501	$4,996	$5,497	0.77	0.91
Jan 2016	$3,258	$2,691	$2,451	0.83	1.10	$9,759	$7,687	$7,948	0.79	0.97
Feb 2016	$3,458	$2,460	$2,775	0.71	0.89	$13,217	$10,147	$10,723	0.77	0.95
Mar 2016	$4,812					$18,028				
Apr 2016	$2,896					$20,924				
May 2016	$2,312					$23,236				
Jun 2016	$1,761					$24,997				
Jul 2016	$1,905					$26,902				
Aug 2016	$1,706					$28,608				
Sep 2016	$2,326					$30,934				
CTD	$30,913	$27,574	$27,345	0.89	1.01					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date
EVMS = Earned Value Management System.
FY = fiscal year.
SPI = schedule performance index

Treat Waste

The current month unfavorable schedule variance (SV) of ($998K) is due to:

- The delays in the procurement of resin for the integrated test. The Microbead Resin manufacturer was unable to produce the needed resin due to previously scheduled production runs. Resin has been acquired from another ORP contract, and was transferred to the project in the previous reporting period.
- Gas retention and release testing has not progressed due to technical issues contributing to the schedule variance. This is due to difficulty in developing a methodology to create hydrogen bubbles in the scoping tests. Bubbles were created using air under vacuum. But, this has not been deemed totally prototypic.
- The electrochemical testing for the "Filter Corrosion Test" required additional testing, which extended the duration of this activity.
- Delays resulting from ventilation design evaluations.

The current month unfavorable cost variance (CV) of ($315K) is due to:

- The primary cost variance is due to the hazards and operability (HAZOP) analysis, and ventilation system issues. Additional resources were required support operations and maintenance (O&M) development work for the model review sessions, drawing review support, and initial design reviews (IDRs).

Single-Shell Tank Closure Program

M-045-00, Complete closure of all SST farms, Due: January 31, 2043, Status: On schedule.

M-045-56K, Complete Implementation of Agreed to Interim Measures, Due: July 31, 2015, Status: Complete. Annual meeting was held July 15, 2015. Meeting notes have been placed in the Administrative Record at this location:
http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0080444H

M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST Waste Management Areas (WMA) (pending the Corrective Measures Study report, Milestone M-45-58, and implementation of other interim corrective measures), Due: To be determined, Status: On schedule.

M-045-61A, Submit to Ecology for review and approval as an Agreement primary document, document review process, a Phase 2 Corrective Measures Study, and Revision 0 update to the RFI Report for WMA-C), Due: December 31, 2016, Status: On Schedule. The RPP-RPT-58339, *Phase 2 RCRA Facility Investigation Report* Draft A for Waste Management Area C (WMA-C), was transmitted to Ecology on December 23, 2014, via letter 14-TF-0131. This milestone was created by *Hanford Federal Facility Agreement and Consent Order* (HFFACO) change package M-45-14-03, signed October 1, 2014.

M-045-62, Submit to Ecology for review and approval as an agreement primary document a Phase 2 Corrective Measures Study Implementation Plan for WMA-C, Due: Six months after the approval of the corrective measures study (CMS) submitted under milestone M-045-61A. Status: On schedule. TPA change control form M-45-15-02 approved on April 14, 2015.

M-045-82, Submit complete permit mod requests for Tiers 1, 2, and 3 of the SST, Due: September 30, 2015, Status: In dispute. Please see issues.

M-045-83, Complete the closure of WMA-C, Due: June 30, 2019, Status: To be missed. Please see issues.

M-045-84, Complete negotiations of TPA interim milestones for closure of second WMA, Due: January 31, 2017, Status: At risk.

M-045-85, Complete negotiations of TPA interim milestones for closure of remaining WMAs, Due: January 31, 2022, Status: On schedule.

M-045-92 (N, O, P, Q, R) Complete Installation of Four (4) Additional Interim Barriers, Due: October 31, 2017, Status: In dispute. Please see issues.

Significant Past Accomplishments: None.

Significant Planned Activities in the Next Six Months:

- Continue data collection for T Farm and TY Farm interim surface barrier monitoring and develop the annual interim barrier monitoring report for 2015.
- Complete TPA/Resource Conservation and Recovery Act (RCRA) Tier 3 closure plan templates for C-200 Tanks
- Finalize/Issue for IDF PA summary analysis.
- Complete the waste management area (WMA) C Appendix I PA

Issues:

- **M-045-82, Submit complete permit mod requests for Tiers 1, 2, and 3 of the SST**
  - Change Control Form M-45-15-03 was submitted by ORP via letter 15-TF-0065, "The U.S. Department of Energy, Office of River Protection Transmittal of Hanford Federal Facility Agreement and Consent Order Change Control Form M-45-15-03 to Modify Milestone M-045-82 for Approval," to Ecology for approval on June 30, 2015.
  - Ecology disapproved M-45-15-03 via letter 15-NWP-128, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Change Control Form, Change Number M-45-15-03, Dated June 25, 2015," on July 14, 2015.
  - ORP initiated dispute resolution via letter 15-TF-0069, "Initiation of Dispute Resolution Regarding Disapproval of Hanford Federal Facility Agreement and Consent Order Change Control Form M-45-15-03," on July 16, 2015.
  - ORP submitted a closure schedule to Ecology on January 13, 2016.
  - This dispute has been extended to May 28, 2016 via letter 16-TF-0035. "Extension at the Project Manager Level for the Hanford Federal Facility Agreement and Consent Order Dispute Regarding Disapproval of Change Control Form M-45-15-03."
- **M-045-92 (N, O, P, Q, R), Complete Installation of Four Additional Interim Barriers**
  - (N) Construct SX interim surface barriers (ISB) 1 and 2 by October 31, 2015
  - (O) Design ISB 3 by June 30, 2015
  - (P) Construct ISB 3 by October 31, 2016
  - (Q) Design ISB 4 by June 30, 2016
  - (R) Construct ISB 4 by October 31, 2017
  - Change control form M-45-15-01 was submitted by ORP via letter 15-TF-0027, "Transmittal for Approval of the Hanford Federal Facility Agreement and Consent Order Change Control Form M-45-15-01 to Modify Milestone M-045-92 Due Dates," to Ecology for approval on March 31, 2015.
  - Ecology disapproved M-45-15-01 via letter 15-NWP-075, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Change Control Form, Change Number M-045-15-01, dated 03/26/15," on April 17, 2015.

- ORP initiated dispute resolution via letter 15-TF-0042, "Initiation of Dispute Resolution Regarding Disapproval of Hanford Federal Facility Agreement and Consent Order Change Control Form M-45-15-01," on April 20, 2015.
- ORP elevated this matter to the Interagency Management Integration Team (IAMIT) for resolution via submission of a statement of dispute on February 16, 2016 (16-TF-0016, "Statement of Dispute Regarding Disapproval of Hanford Federal Facility Agreement and Consent Order Change Control Form M-45-15-01").
- ORP and Ecology have extended the deadline for resolution of the M-45-15-01 dispute at the IAMIT level the next regularly-scheduled IAMIT meeting (March 17, 2016) following the entry of a final order modifying the Consent Decree in State of Washington vs United States. Department of Energy, No. 08-5085-RMP.
- In accordance with Decision/Determination/Action Assignment Number 2016-002: The IAMIT has agreed that the dispute on change control form M-45-15-01 is extended at the IAMIT level until May 20, 2016.

Single-Shell Tank Retrieval Program

M-045-70, Complete waste retrieval from all remaining SSTs, Due: December 31, 2040, Status: On schedule.

M-045-86, Submit retrieval data report (RDR) to Ecology for 19 tanks retrieved, Due: To be determined (12 months after retrieval certification), Status: On schedule.

- M-045-86I: RDR for C-101 was due September 24, 2015, completed on September 24, 2015 with letter 15-TF-0099, "The U.S. Department of Energy, Office of River Protection Submits the Retrieval Data Report for Tank 241-C-101."
- M-045-86C: RDR for C-104 was due March 21, 2014, completed on February 18, 2014 with letter 14-TF-0013, "The U.S. Department of Energy, Office of River Protection Submits the Retrieval Data Report for Tank 241-C-104."
- M-45-86E: RDR for C-107 was due July 28, 2015, completed on September 15, 2015 with letter 15-TF-0086, "The U.S. Department of Energy, Office of River Protection Submits the Retrieval Data Report for Tank 241-C-107."
- M-045-86F: RDR for C-108 was due May 1, 2014, completed on November 27, 2013 with letter 13-TF-0120, "Submittal of Retrieval Data Report for Single-Shell Tank 241-C-108, RPP-RPT-55896, Revision 1."
- M-045-86G: RDR for C-109 was due June 4, 2014, completed on March 13, 2014 with letter 14-TF-0020, "The U.S. Department of Energy, Office of River Protection Submits the Retrieval Data Report for Tank 241-C-109."
- M-045-86H: RDR for C-110 was due January 29, 2015, completed on August 6, 2014 with letter 14-TF-0086, "The U.S. Department of Energy, Office of River Protection Submits the Retrieval Data Report for Tank 241-C-110."
- M-045-86K: RDR for C-112 was due September 30, 2015, completed on September 30, 2015 with letter 15-TF-0098, "The U.S. Department of Energy, Office of River Protection Submits the Retrieval Data Report for Tank 241-C-112."

Significant Past Accomplishments:

- Washington State Department of Ecology (Ecology) approved practicability evaluation request to forego a third retrieval technology in Tank 241-C-102.
- Completed Tank 241-C-102 Retrieval Completion Certification.
- Completed post retrieval samples of C-102.
- Retrieved waste from Tank 241-C-105 utilizing the Mobile Arm Retrieval System – Vacuum (MARS-V) and high-pressure water to a remaining volume of 67,300 gallons.
- Obtained Tank 241-C-105 in-process sample.
- Initiate planned equipment removal of the Tank C-105 MARS-V, to ready tank for modification to modified sluicing system.

- Completed isolation of legacy duct ventilation lines at Tank 241-AX-101, Tank 241-AX-102, Tank 241-AX-103 and Tank 241-AX-104.
- Completed Tank 241-AX-102 cover block removal and initiated pit cleanout of Tank AX-102, 02A pit.
- Completed three retrieval technologies at Tank 241-C-111.

Significant Planned Activities in the Next Six Months:

- Installation of the modified sluicing system using ERSS at Tank 241-C-105
- Complete A/AX infrastructure (water and utilities) design – fiscal year (FY) 2015 Phase 4A and Phase 5.
- Complete Tank 241-AX-102 and 241-AX-104 ERSS procurement.
- Complete Tank 241-AX-102 above tank equipment removal from pits.
- Complete AX Farm field work for tower, stack extension, and platform installation.
- Complete AX-2707 fencing and gate upgrades
- Complete AX ventilation installation, testing and startup at portable exhauster (POR) 126.
- Complete Building AX-2707 and Building AX-80 removal and disposal.

Issues: None.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Third Technology	MARS-V	MARS-V-High Pressure Water Spray	TBD
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S -High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

ERSS = Extended Reach Sluicing System
MARS = Mobile Arm Retrieval System
S = sluicing
TBD = To Be Determined
TWRWP = Tank Waste Retrieval Work Plan
V = vacuum

Significant Accomplishments: None.

Significant Planned Activities in the Next Six Months:

- Finalize AX Farm tank waste retrieval work plans.
- Modify RPP-22520, *241-C-101, and 241-C-105, Tanks Waste Retrieval Work Plan*, (C-105 TWRWP) to include a third technology for C-105 retrieval

Issues: None.

Tank in Appendix H, "Status - Single Shell Waste Retrieval Criteria"

Tank 241-C-106
Significant Past Accomplishments: None.

Significant Planned Activities in the Next Six Months:

- Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A request for additional information was received from the NRC in February 2009.

Issues:

- It has been discussed with the NRC that much of the additional information requested is dependent upon development of C Farm residual waste PA and, therefore, cannot be provided until the PA is published.

Tank Retrievals with Individual Milestones

Tank 241-A-103
M-045-15, Completion of Tank A-103 SST Waste Retrieval, Due: September 30, 2022, Status: On schedule. Change package M-45-11-04 replaced Tank S-102 with Tank A-103 and changed the milestone completion date for M-045-15 to September 30, 2022.

M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I, Due: September 30, 2022, Status: On schedule. Updated with Tank A-103 and due date of September 30, 2022, per change package M-45-11-04.

M-045-15D, Embedded Milestone, if appropriate, DOE will request an exception to waste retrieval criteria pursuant to Agreement Appendix H, Due: September 30, 2022, Status: On schedule. Updated with Tank A-103 and due date of September 30, 2022, per change package M-45-11-04.

Significant Past Accomplishments:

- Change package M-45-11-04 was signed by ORP and Ecology on April 19, 2011.

No significant planned activities in the next six months and no issues for Tank 241-A-103.

Tank 241-S-112
M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project, Due: To be determined (in accordance with M-045-84 or M-045-85), Status: On schedule.

M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112, Due: To be determined, Status: On schedule as part of M-045-84 or M-045-85.

Significant Past Accomplishments:

- Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

No significant planned activities in the next six months and no issues for Tank 241-S-112.

FINAL

Office of River Protection
Consent Decree 2:08-CV-5085-RMP (2016)

Monthly Summary Report

April 2016

Office of River Protection

Consent Decree 08-5085-FVS and Consent Decree 2:08-CV-5085-RMP

Monthly Summary Report – April 2016

Project Earned Value Management System reflects February 2016 information

CD Milestone Statistics/Status

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2020				
D-00A-07 Interim	LAW Facility Construction Substantially Complete	12/31/2020		On Schedule
D-16B-03*	Of the 12 SSTs referred to in B-1 and B-2, complete retrieval of tank waste in at least 5.	12/31/2020		On Schedule
Fiscal Year 2022				
D-00A-08 Interim	Start LAW Facility Cold Commissioning	12/31/2022		On Schedule
Fiscal Year 2023				
D-00A-09 Interim	LAW Facility Hot Commissioning Complete	12/31/2023		On Schedule
Fiscal Year 2024				
D-16B-01*	Complete Retrieval of Tank Waste from the following remaining SSTs in WMA-C: C-102, C-105 and C-111	3/31/2024		On Schedule
D-16B-02*	Complete retrieval of tank wastes from the following SSTs in Tank Farms A and AX: A-101, A-102, A-104, A-105, A-106. AX-101, AX-102, AX-103, and AX-104. Subject to the requirements of Section IV-B-3 DOE may substitute any of the identified 9 SSTs and advice Ecology accordingly.	3/31/2024		On Schedule
Fiscal Year 2030				
D-00A-02 Interim	HLW Facility Construction Substantially Complete	12/31/2030		On Schedule
Fiscal Year 2031				
D-00A-13 Interim	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2031		On Schedule
D-00A-14 Interim	PT Facility Construction Substantially Complete	12/31/2031		On Schedule

Milestone	Title	Due Date	Completion Date	Status
D-00A-19 Interim	Complete Elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2031		On Schedule
Fiscal Year 2032				
D-00A-03 Interim	Start HLW Facility Cold Commissioning	06/30/2032		On Schedule
D-00A-06 Interim	Complete Methods Validations	06/30/2032		On Schedule
D-00A-15 Interim	Start PT Facility Cold Commissioning	12/31/2032		On Schedule
Fiscal Year 2033				
D-00A-04 Interim	HLW Facility Hot Commissioning Complete	12/31/2033		On Schedule
D-00A-16 Interim	PT Facility Hot Commissioning Complete	12/31/2033		On Schedule
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2033		On Schedule
Fiscal Year 2036				
D-00A-01	Achieve Initial Plant Operations for the Waste Treatment Plan	12/31/2036		On Schedule

* Milestones B-1, B-2, and B-3 narrative changed in accordance with 2016 amended Consent Decree (CD). Per this amendment, there is no longer a milestone B-4.

CD = Consent Decree.
DOE = Department of Energy
Ecology = Washington State Department of Ecology
HLW = high-level waste.
LAW = low-activity waste.
PT = pretreatment.
SST = single-shell tank.
WMA-C = C Farm waste management area.

Consent Decree Reports/Reviews

D-16C-03 series, Submit to State of Washington and State of Oregon Quarterly Report, Due: TBD, Status: On Schedule.
In accordance with the 2016 Amended Consent Decree, DOE will provide Quarterly instead of semiannual reports.
The January 2016 Semiannual Report was issued on January 29, 2016, via U.S. Department of Energy (DOE), Office of River Protection (ORP) letter 16-ECD-0006, "January 2016 Semi-Annual Report for State of Washington vs. U.S. Department of Energy, Case No. 08-5085-FVS, for Waste Treatment and Immobilization Plant Construction and Startup Activities and Tank Retrieval Activities – May 1, 2015, thorough October 31, 2015."

D-00C-02 series, Submit to State of Washington and State of Oregon Monthly Summary Reports, Due: End of each month, Status: On Schedule.

D-006-00-B1, Provide State of Oregon notice of meetings in D-006-00-B, etc. no less than 30 days before they are scheduled, Due: September 25, 2016, Status: On Schedule.

D-006-00-B, Meet Approximately Every Three Years after Entry of Decree to review requirements of the Consent Decree, Due: October 25, 2016, Status: On Schedule.

Spare Reboiler Requirement Status

Milestone	Title	Due Date	Status
D-16E-01	DOE must purchase by December 31, 2016 a spare A-E-1 reboiler for the 242-A Evaporator*	12/31/2016	On Schedule
D-16E-02	Have available spare A-E-1 reboiler for the 242-A Evaporator*	12/31/2018	On Schedule

*CD 08-5085-FVS, Part IV B.5 as amended by No. 2:08-CV-5085-RMP dated April 12, 2016

Description of activity and progress made for the spare A-E-1 reboiler for the 242-A Evaporator:

- Since issuance of the March 11, 2016 amended consent order, DOE has provided the contractor with funding to accelerate the planned FY 2017 work to design and procure the spare A-E-1 reboiler. ORP authorized Washington River Protection Solutions (WRPS) to proceed by awarding a not-to-exceed (NTE) contract action. The contractor is currently underway generating a procurement specification for the new spare 242-A Evaporator reboiler. The current procurement strategy is to award a design/build procurement contract with a vendor by November 20, 2016.
- Current efforts include the generation of a functions and requirements evaluation document (FRED) as well as a failure mode and effects analysis (FMEA) document. An expression of interest is being submitted Tuesday, April 19 to solicit responses from NQA-1, ASME Section 8 design and build fabrication vendors.
- There is no cost and schedule performance data to report from February 2016, but DOE will provide such information when it becomes available.

Single-Shell Tank Retrieval Program

Milestone	Title	Due Date	Status
D-16B-03	Of the 12 SSTs referred to in B-1 and B-2, complete retrieval of tank waste in at least 5.	12/31/2020*	On Schedule
D-16B-01	Complete retrieval of tank waste from the following remaining SSTs in WMA-C: C-102, C-105 and C-111	3/31/2024	On Schedule
D-16B-02	Complete retrieval of tank wastes from the following SSTs in Tank Farms A and AX: A-101, A-102, A-104, A-105, A-106, AX-101, AX-102, AX-103, and AX-104. Subject to the requirements of Section IV-B-3 DOE may substitute any of the identified 9 SSTs and advice Ecology accordingly.	3/31/2024	On Schedule

* Pursuant to Section IV-B-~~5~~ 7 of the Consent Decree, the U.S. Department of Energy (DOE) must submit to the Washington State Department of Ecology (Ecology) a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix C, Part 1, of the Consent Decree.

DOE = Department of Energy
SST = single shell tank
WMA-C = C Farm waste management area.

Significant Accomplishments during the Prior Three Months:

- Completed post retrieval samples of Tank C-102.
- Obtained Tank 241-C-105 in-process sample.
- Retrieved waste from Tank 241-C-105 utilizing the Mobile Arm Retrieval System – Vacuum (MARS-V) and high-pressure water to a remaining volume of 67,300 gallons.
- Started preparations for equipment removal of the Tank C-105 MARS-V, to ready tank for modification to modified sluicing system.
- Completed three retrieval technologies to their limits at Tank 241-C-111.
- Completed Tank 241-AX-102 cover block removal.
- Initiated pit cleanout of Tank AX-102, 02A pit.

Significant Planned Activities in the Next Three Months:

- Complete A/AX infrastructure (water and utilities) design – fiscal year (FY) 2015 Phase 4A and Phase 5.
- Complete AX Farm field work for tower, stack extension, and platform installation.
- Complete equipment removal/disposal at Tank AX-101 pit and riser.
- Complete AX-2707 fencing and gate upgrades
- Complete AX ventilation installation, testing and startup at portable exhauster (POR) 126.
- Complete building AX-2707 and building AX-80 removal and disposal
- Obtain TWRWP modification approval for Tank C-105 third retrieval technology
- Negotiate contract proposal for installing and performing the third retrieval technology at Tank C-105.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Third Technology	MARS-V	MARS-V-High Pressure Water Spray	TBD
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S-High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

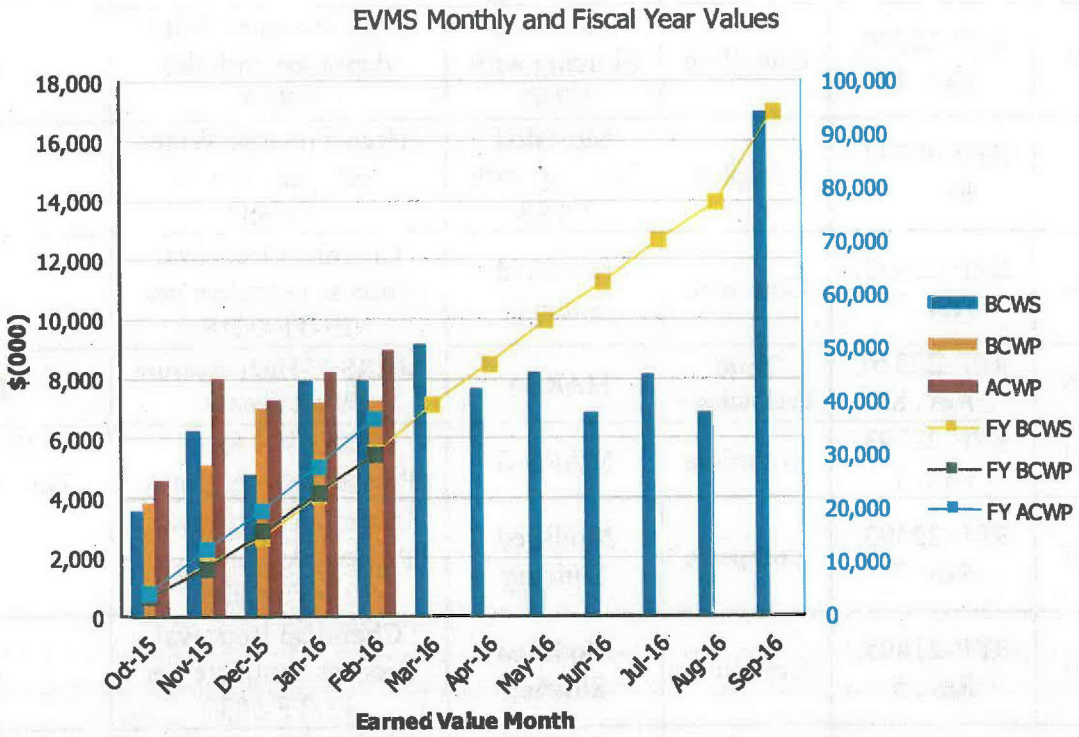
ERSS = extended reach sluicing system.
MARS = Mobile Arm Retrieval System.
S = sluicing.
TBD = to be determined.
TWRWP = Tank Waste Retrieval Work Plan.
V = vacuum.

Significant Planned Activities in the Next Three Months:

- Finalize AX Farm tank waste retrieval work plans.
- Modify RPP-22520 *241-C-101 and 241-C-105 Tanks Waste Retrieval Work Plan* (C-105 TWRWP) to include a third technology for Tank C-105 retrieval

Earned Value Data: Fiscal Year 2016 February-16

Tank Farms ORP-0014
Retrieve and Close SST's 5.02



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$3,557	$3,814	$4,560	1.07	0.84	$3,557	$3,814	$4,560	1.07	0.84
Nov 2015	$6,282	$5,131	$8,006	0.82	0.64	$9,839	$8,946	$12,566	0.91	0.71
Dec 2015	$4,769	$6,970	$7,255	1.46	0.96	$14,608	$15,915	$19,821	1.09	0.80
Jan 2016	$7,914	$7,214	$8,233	0.91	0.88	$22,522	$23,130	$28,053	1.03	0.82
Feb 2016	$7,948	$7,288	$8,959	0.92	0.81	$30,470	$30,417	$37,012	1.00	0.82
Mar 2016	$9,130					$39,600				
Apr 2016	$7,648					$47,248				
May 2016	$8,210					$55,458				
Jun 2016	$6,890					$62,348				
Jul 2016	$8,126					$70,474				
Aug 2016	$6,834					$77,307				
Sep 2016	$16,966					$94,273				
CTD	$622,948	$615,644	$646,984	0.99	0.95					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date.
EVMS = earned value management system.
FY = fiscal year.
SPI = schedule performance index.

Retrieve and Close Single-Shell Tanks

The current month unfavorable schedule variance (SV) of ($660K) is due to:

- AX Farm procurements (extended reach sluicer system [ERSS], demister water supply) were re-prioritized due to funding/budget constraints related to higher tank farm priorities (AY-102, C-105 and C-111). Material and equipment were re-sequenced based on priority, lead time and field installation.

The current month unfavorable cost variance (CV) of ($1,671K) is due to:

- Additional duration and resources have been required to complete AX Farm ventilation installation activities due to impacts associated with the use of self-contained breathing apparatus (SCBA) and higher than expected soil contamination levels.

Waste Treatment and Immobilization Plant Project

Milestone	Title	Due Date	Status
D-00A-06	Complete Methods Validations	6/30/2032	On Schedule
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2033	On Schedule
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2036	On Schedule

WTP = Waste Treatment and Immobilization Plant

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 3117 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 552 craft, 447 non-manual, and 140 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

In October 2012, the percent-complete values for the Pretreatment (PT) and High-Level Waste (HLW) facilities were frozen at the September 2012 rate. Construction, procurement, and production engineering activities were placed on hold for the PT Facility and significantly slowed down for the HLW Facility. In August 2014, the U.S. Department of Energy (DOE) approved continuation of production engineering activities for HLW. Subsequently, DOE has approved the fiscal year (FY) 2015 and FY 2016 2-Year Interim Work Plan. In April 2015, a 3-Year Interim Work Plan for the PT Facility was implemented emphasizing prioritization of technical issue resolution activities. The WTP Project is focused on resolving the PT Facility technical issues and finalizing the HLW Facility design.

The WTP Project continues to focus on completion of the Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively known as LBL, including LBL facility services). As of February 2016, LBL facilities were 48 percent complete, design and engineering was 74 percent complete, procurement was 69 percent complete, construction was 74 percent complete, and startup and commissioning was 9 percent complete.

In February 2016, the cumulative to-date WTP Project schedule variance was a negative $21.3 million, and the cumulative to-date WTP Project cost variance was a positive $61.9 million. The cumulative to-date cost and schedule variance is based on the progress of the LBL internal forecast.

The following is the project status through the end of February 2016.

Significant Accomplishments during the Prior Three Months:

- DOE Office of River Protection (ORP) received the draft WTP Criticality Safety Evaluation Report (CSER) – (PT)
- Began installing pulse-jet mixers (PJM) in vessel at Greenberry Industrial, Inc. – (PT)
- Received the thermal catalytic oxidizer (TCO) and ammonia dilution skid (ADS) – (LAW)

- Melter lid 1 was successfully flipped – (LAW)
- ORP approved the Preliminary Documented Safety Analysis (PDSA) for the Effluent Management Facility (EMF) – (BOF)
- PDSA change package for radioactive liquid waste disposal (RLD) vessels 7 and 8 has been approved by DOE – (HLW)
- Approved Mississippi State University's NQA-1 quality assurance program for the high-efficiency particulate air (HEPA) filter testing – (HLW)
- Completed installation of Wet Electrostatic Precipitator (WESP) electrode assemblies in one vessel – (LAW)
- Completed TCO and ADS functional test – (LAW)
- Completed installation of the mud mat for the EMF processing, electrical and utility buildings – (BOF).

Significant Planned Activities in the Next Three Months:

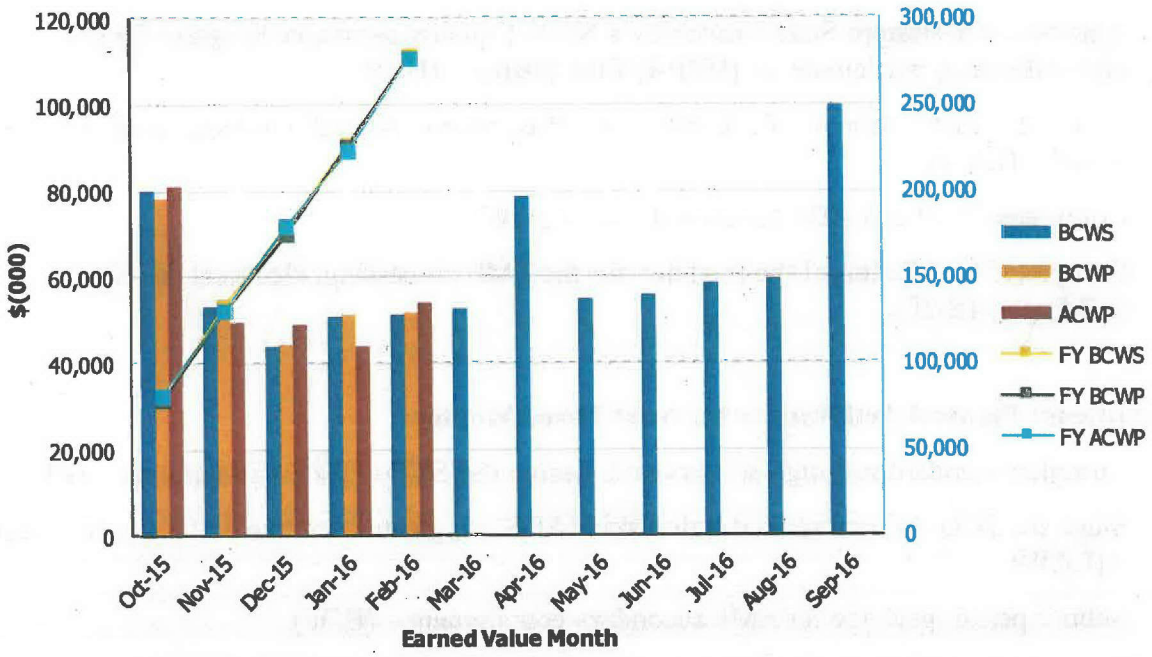
- Complete standardized high solids vessel design (SHSVD) -T PJM installation – (PT)
- Stage the TCO and ammonia dilution skid (ADS) on greater than the 48 foot (+48') elevation – (LAW)
- Submit permit package for EMF secondary containment – (BOF)
- Transmit final Hydrogen in Piping and Ancillary Vessels (HPAV) Preliminary Documented Safety Analysis (PDSA) change package to ORP for approval pending comment resolution – (PT)
- Issue Phase 1 of the high-level waste (HLW) melter off-gas treatment process/process vessel vent engineering study – (HLW)
- Issue the radioactive waste handling system, decontamination handling system, and melter cave support handling system engineering studies – (HLW)
- Place second melter lid castable refractor – (LAW)

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data Data as of: February 2016

Waste Treatment Plant (WTP) Project

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$79,800	$78,230	$81,000	0.98	0.97	$79,800	$78,230	$81,000	0.98	0.97
Nov 2015	$52,815	$51,614	$49,184	0.98	1.05	$132,615	$129,844	$130,184	0.98	1.00
Dec 2015	$43,659	$44,505	$48,853	1.02	0.91	$176,275	$174,348	$179,037	0.99	0.97
Jan 2016	$50,515	$51,167	$43,662	1.01	1.17	$226,790	$225,515	$222,699	0.99	1.01
Feb 2016	$51,349	$51,492	$54,112	1.00	0.95	$278,139	$277,007	$276,811	1.00	1.00
Mar 2016	$52,408									
Apr 2016	$78,790									
May 2016	$54,822									
Jun 2016	$55,908									
Jul 2016	$58,359									
Aug 2016	$59,582									
Sep 2016	$99,872									
PTD	$9,377,902	$9,356,554	$9,294,613	1.00	1.01					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date.
EVMS = earned value management system.
FY = fiscal year.
SPI = schedule performance index.

Pretreatment Facility

Milestone	Title	Due Date	Status
D-00A-19	Complete Elevation 98' Concrete Floor Slab in PT Facility	12/31/2031	On Schedule
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2031	On Schedule
D-00A-14	PT Facility Construction Substantially Complete	12/31/2031	On Schedule
D-00A-15	Start PT Facility Cold Commissioning	12/31/2032	On Schedule
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2033	On Schedule

PT = pretreatment

The Pretreatment (PT) Facility will separate radioactive tank waste into high-level waste (HLW) and low-activity waste (LAW) fractions, and transfer each waste type to the respective vitrification facility for immobilization. As of September 2012, the PT Facility was 56 percent complete overall, with engineering design 85 percent complete, procurement 56 percent complete, construction 43 percent complete, and startup and commissioning 3 percent complete. Construction, procurement, and production engineering activities remain on hold, resulting in no change to the percent-complete status since September 2012. Bechtel National, Inc. (BNI) and U.S. Department of Energy (DOE) continue to focus on resolving technical issues, performing hazards analyses, and completing safety evaluations for process systems in accordance with the revised PT Facility 3-year Interim Work Plan

BNI has submitted resolution plans for eight technical issues: T1, Hydrogen in Vessels; T2, Criticality; T3, Hydrogen in Piping and Ancillary Vessels (HPAV); T4, Mixing; T5, Erosion Corrosion; T6, PT Facility Optimization; T7, Vessel Analysis; and T8, Ventilation. Phase 1 of the full-scale vessel testing is continuing for the pulse jet mixers (PJM) controls utilizing the radioactive liquid waste disposal (RLD) 8T vessel. Technical review teams continue to evaluate open PT Facility technical issues. An evaluation is ongoing relative to a standardized design for high-solids vessels within the PT Facility. With primary emphasis on design and fabrication of hold point releases supporting procurement, fabrication, and delivery of the standardized high solids vessel design (SHSVD)-T16ft vessel.

Significant Accomplishments during the Prior Three Months:

- DOE Office of River Protection (ORP) received draft Waste Treatment and Immobilization Plant (WTP) Criticality Safety Evaluation Report (CSER)
- Began installing PJMs in vessel at Greenberry Industrial, Inc.

- Energy*Solutions* completed PJM level instrument test at Energy*Solutions* Engineering Laboratory (ESEL)
- Issued chemistry study for testing SHSVD-T
- Draft HPAV Preliminary Documented Safety Analysis (PDSA) change package for ORP comments

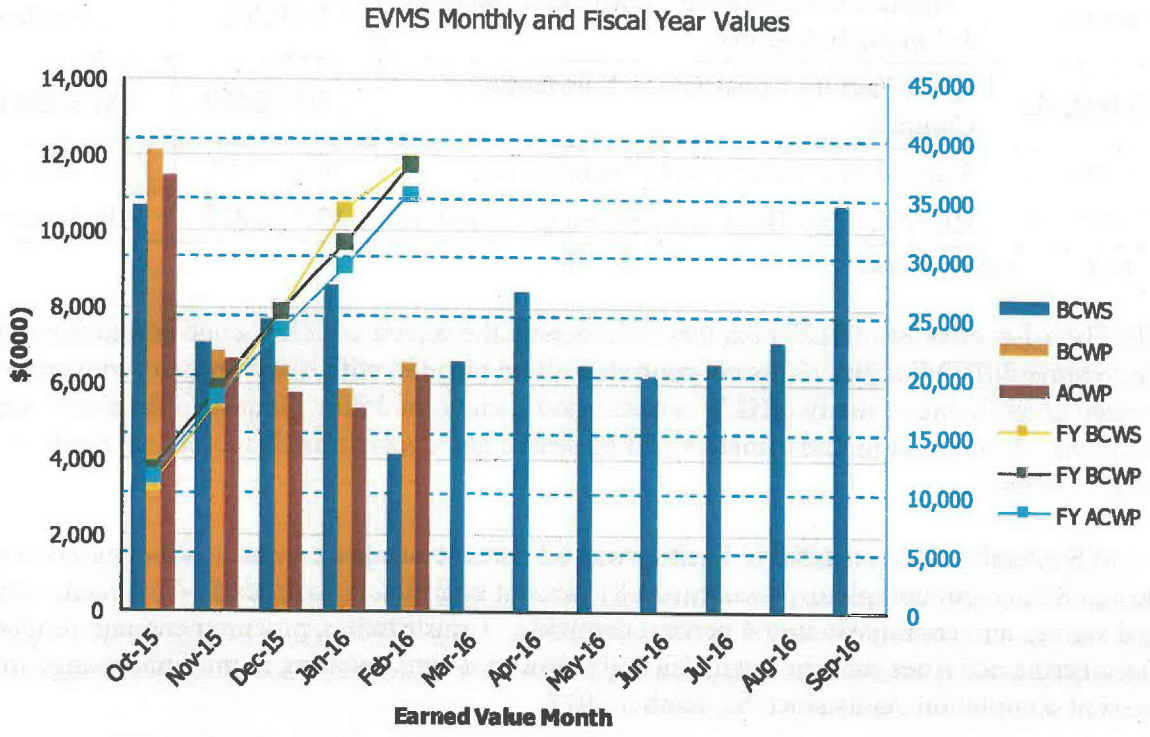
Significant Planned Activities in the Next Three Months:

- Transmit final HPAV PDSA change package to ORP for approval pending comment resolution
- Complete SHSVD-T PJM installation
- Weld SHSVD-T top head to body
- Finalize erosion / corrosion simulant for one-quarter scale jet impingement and pipe loop testing
- Issue SHSVD Design Verification Guide
- Complete sliding bed evaluation reports and transmit to ORP for review
- Update T5 plan, cost and schedule as a result of an erosion/corrosion workshop

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data Data as of: February 2016

River Protection Project
Pretreatment Facility (WBS 1.01)



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$10,667	$12,155	$11,441	1.14	1.06	$10,667	$12,155	$11,441	1.14	1.06
Nov 2015	$7,074	$6,836	$6,648	0.97	1.03	$17,741	$18,991	$18,089	1.07	1.05
Dec 2015	$7,678	$6,441	$5,777	0.84	1.11	$25,419	$25,432	$23,867	1.00	1.07
Jan 2016	$8,595	$5,853	$5,332	0.68	1.10	$34,014	$31,285	$29,199	0.92	1.07
Feb 2016	$4,105	$6,545	$6,220	1.59	1.05	$38,120	$37,830	$35,419	0.99	1.07
Mar 2016	$6,588									
Apr 2016	$8,413									
May 2016	$6,469									
Jun 2016	$6,197									
Jul 2016	$6,558									
Aug 2016	$7,127									
Sep 2016	$10,732									
PTD	$1,770,520	$1,769,662	$1,747,978	1.00	1.01					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date.
EVMS = earned value management system.
FY = fiscal year
SPI = schedule performance index.

High-Level Waste Facility

Milestone	Title	Due Date	Status
D-00A-20	Complete Construction of Structural Steel to 14' in HLW Facility	12/31/2010	Complete
D-00A-21	Complete Construction of Structural Steel to 37' in HLW Facility	12/31/2012	Complete
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2030	On Schedule
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2032	On Schedule
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2033	On Schedule

HLW = high-level waste

The High-Level Waste (HLW) Facility will receive the separated HLW concentrate from the Pretreatment (PT) Facility. This concentrate will be blended with glass formers, converted into molten glass in one of the two HLW melters, and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated before shipping to interim storage.

As of September 2012, the HLW Facility was 62 percent complete overall, with engineering design 89 percent complete, procurement 81 percent complete, construction 43 percent complete, and startup and commissioning 4 percent complete. Construction, procurement, and production engineering activities have been significantly slowed down, resulting in minimal change to the percent completion status since September 2012.

Currently, all activities are being performed in accordance with the fiscal year (FY) 2015/FY 2016 2-Year Work Plan. Efforts are focused on completing activities required to obtain full-production authorization by the U.S. Department of Energy (DOE), including developing longer-term work plans. Limited construction is continuing with the concrete placements, installation of support steel, and crane rails in the melter caves.

Engineering is focused on activities to support implementation of technical core team recommendations, performance of engineering studies and analysis to disposition design and operability review comments. Phase 1 of the HLW melter off-gas treatment process/process vessel vent engineering study, which is evaluating options for system changes to improve the design and operability, is ongoing. Hazard and accident analyses are ongoing to support the preliminary documented safety analysis (PDSA) update to align design and the safety basis.

Systems engineering continues to develop system design descriptions (SDD), and incorporate SDD requirements into a requirements management system to ensure that all requirements are verified at the completion of design.

Multiple high-efficiency particulate air (HEPA) filter media designs are planned to be tested to ensure the qualified filters support the needs for HLW, along with the Low-Activity Waste

(LAW) Facility, Analytical Laboratory (LAB), and the Balance of Facilities (BOF) (collectively known as LBL, including LBL facility services). Testing of the full-scale filter designs at Mississippi State University is ongoing. The third full-scale filter has been tested, showing positive and successful test results. Fabrication of the additional filters and testing continues.

The PDSA change package for radioactive liquid waste disposal (RLD) vessels 7 and 8 has been approved by DOE, allowing initiation of procurement of these vessels.

Significant Accomplishments during the Prior Three Months:

- Completed full-scale tests of three filters of the first HEPA filter design that showed positive results
- PDSA change package for RLD vessels 7 and 8 has been approved by DOE
- Issued the revised RLD system design description incorporating PDSA changes
- Issued the emergency turbine generator system (ETX) system design description
- Completed roof flashing at interface between the annex and the main facility, thereby rain-proofing the annex
- Approved Mississippi State University's NQA-1 quality assurance program for the HEPA filter testing

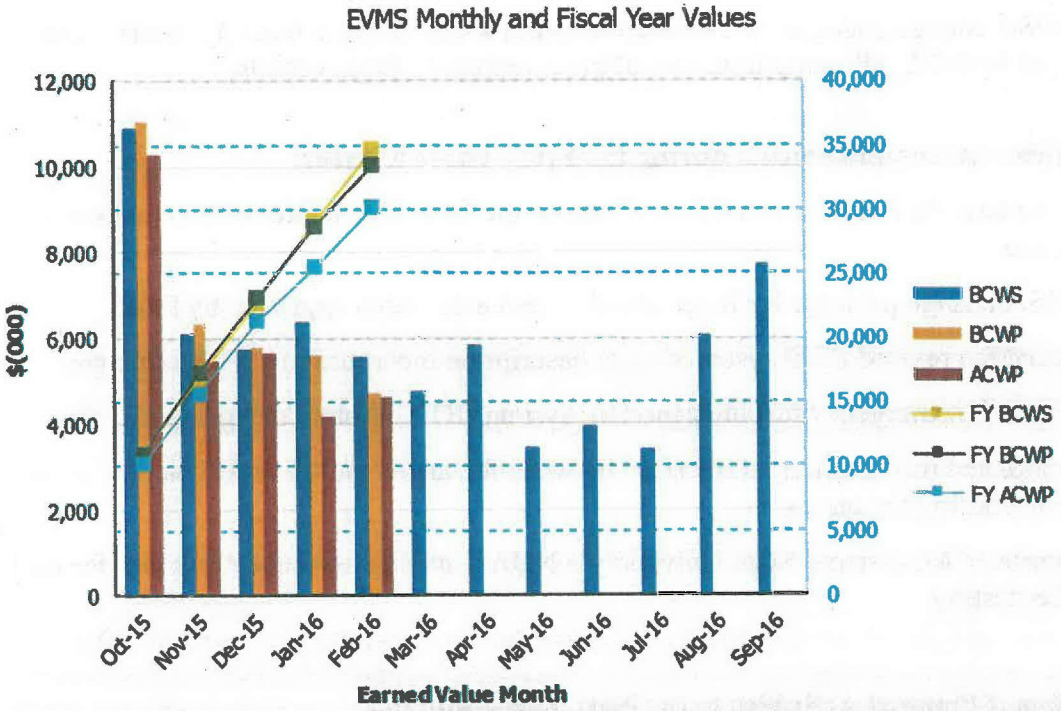
Significant Planned Activities in the Next Three Months:

- Continue full-scale HEPA filter testing to select and qualify additional filter(s) that will support the WTP ventilation and off-gas needs
- Issue Phase 1 of the HLW melter off-gas treatment process/process vessel vent engineering study
- Issue the radioactive waste handling system, decontamination handling system, and melter cave support handling system engineering studies
- Issue an engineering study detailing the potential addition of a melter assembly building/airlock and an additional import/export dock for waste handling
- Complete facility hazards analysis to support PDSA update
- Continue civil build-out of the HLW Facility

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data Data as of: February 2016

River Protection Project
High-Level Waste Facility (WBS 1.03)



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$10,905	$11,028	$10,257	1.01	1.08	$10,905	$11,028	$10,257	1.01	1.08
Nov 2015	$6,103	$6,326	$5,452	1.04	1.16	$17,008	$17,355	$15,708	1.02	1.10
Dec 2015	$5,737	$5,795	$5,634	1.01	1.03	$22,745	$23,150	$21,343	1.02	1.08
Jan 2016	$6,368	$5,591	$4,174	0.88	1.34	$29,113	$28,741	$25,517	0.99	1.13
Feb 2016	$5,551	$4,711	$4,631	0.85	1.02	$34,664	$33,453	$30,148	0.97	1.11
Mar 2016	$4,740									
Apr 2016	$5,817									
May 2016	$3,466									
Jun 2016	$3,948									
Jul 2016	$3,393									
Aug 2016	$6,076									
Sep 2016	$7,737									
PTD	$1,235,952	$1,233,718	$1,216,278	1.00	1.01					

ACWP	=	actual cost of work performed.	CTD	=	contract to date.
BCWP	=	budgeted cost of work performed.	EVMS	=	earned value management system.
BCWS	=	budgeted cost of work scheduled.	FY	=	fiscal year.
CPI	=	cost performance index.	SPI	=	schedule performance index.

Low-Activity Waste Facility

Milestone	Title	Due Date	Status
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2020	On Schedule
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2022	On Schedule
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2023	On Schedule

LAW = low-activity waste

The Low-Activity Waste (LAW) Facility will process concentrated low-activity waste which will be mixed with silica and other glass-forming materials. The mixture will be fed into the LAW's two melters, at a design capacity of 30 metric tons per day, and heated to 2,100 degrees Fahrenheit and vitrified into glass. The 300-ton melters are approximately 20 feet by 30 feet and 16 feet high. The glass mixture will then be poured into stainless steel containers, which are 4 feet in diameter, 7 feet tall and weigh more than 7 tons. These containers are anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of February 2016, the LAW Facility was 53 percent complete overall, with engineering design 73 percent complete, procurement 70 percent complete, construction 77 percent complete, and startup and commissioning 5 percent complete.

Significant Accomplishments during the Prior Three Months:

- Installed 580 linear feet of process piping
- Installed 4,030 linear feet of conduit and pulled 42,080 linear feet of cable
- Installed 394 process area penetration seals
- Received the thermal catalytic oxidizer (TCO) and ammonia dilution skid (ADS)
- Melter lid 1 was successfully flipped
- Completed installation of Wet Electrostatic Precipitator (WESP) electrode assemblies in one vessel
- Completed TCO and ADS functional test
- Completed subcontractor work scope in the annex

Significant Planned Activities in the Next Three Months:

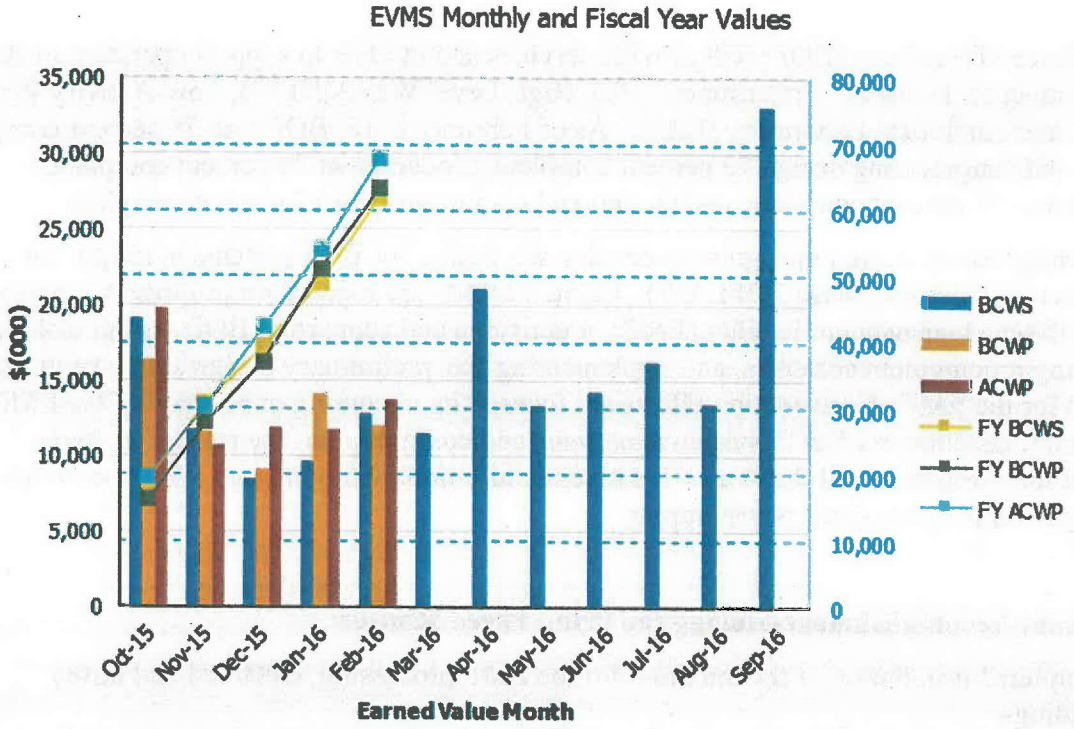
- Assemble and install WESP internals in second vessel
- Place second melter lid castable refractor
- Complete Documented Safety Analysis (DSA) Chapter 3.3, "Hazards Analysis"

- Stage the TCO and ammonia dilution skid (ADS) on greater than the 48 foot (+48′) elevation
- Complete the radiographic testing on the caustic scrubber
- Continue the re-baseline review process.

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data Data as of: February 2016

River Protection Project
Low-Activity Waste Facility (WBS 1.02)



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$19,131	$16,406	$19,702	0.86	0.83	$19,131	$16,406	$19,702	0.86	0.83
Nov 2015	$11,764	$11,637	$10,735	0.99	1.08	$30,896	$28,043	$30,436	0.91	0.92
Dec 2015	$8,520	$9,132	$11,880	1.07	0.77	$39,416	$37,175	$42,316	0.94	0.88
Jan 2016	$9,694	$14,071	$11,790	1.45	1.19	$49,110	$51,245	$54,105	1.04	0.95
Feb 2016	$12,760	$12,055	$13,698	0.94	0.88	$61,870	$63,300	$67,804	1.02	0.93
Mar 2016	$11,541									
Apr 2016	$21,064									
May 2016	$13,326									
Jun 2016	$14,247									
Jul 2016	$16,272									
Aug 2016	$13,520									
Sep 2016	$33,098									
PTD	$1,280,069	$1,271,556	$1,269,293	0.99	1.00					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date.
EVMS = earned value management system.
FY = fiscal year
SPI = schedule performance index.

Balance of Facilities

Milestone	Title	Due Date	Status
D-00A-12	Steam Plant Construction Complete	12/31/2012	Complete

The Balance of Facilities (BOF) will provide services and utilities to support operation of the main production facilities: Pretreatment (PT), High-Level Waste (HLW), Low-Activity Waste (LAW), and Analytical Laboratory (LAB). As of February 2016, BOF was 55 percent complete overall, with engineering design 75 percent complete, procurement 76 percent complete, construction 82 percent complete, and startup and commissioning 15 percent complete.

Engineering activities are in progress to develop the design for BOF systems in support of direct-feed low-activity-waste (DFLAW). Current efforts are focused on progressing the design of the Effluent Management Facility (EMF), identifying and supporting BOF system isolations, supporting procurement activities, and implementing the preliminary design safety analysis (PDSA) for the EMF. Construction efforts are focused on upcoming excavation of the EMF low point drain, installation of BOF system isolations, and completion of the remaining items required for energization of the Waste Treatment and Immobilization Plant (WTP) switchgear building from the permanent power supply.

Significant Accomplishments during the Prior Three Months:

- Completed installation of the mud mat for the EMF processing, electrical and utility buildings
- Continued installing communications in the switchgear buildings and nonradioactive liquid waste disposal (NLD)
- Continued installing the battery monitoring system in the switchgear buildings
- Issued Material Requisition Purchase (MRP) order for the rotary screw compressor
- Continued excavation and drilling activities to install cathodic protection system upgrades and started anode installation and backfill
- The DOE Office of River Protection (ORP) approved the PDSA for EMF
- Completed Fire Service Water FSW-B-02 system turnover

Significant Planned Activities in the Next Three Months:

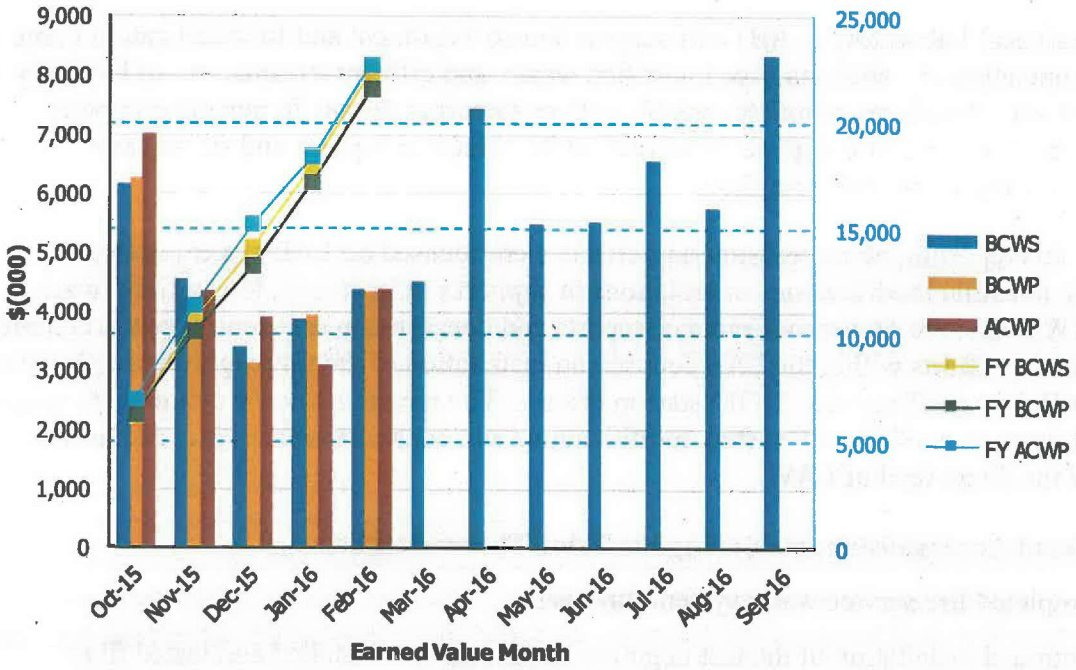
- Award subcontract for soldier piles of EMF low point drain
- Complete site energization from permanent power supply
- Submit permit package for EMF secondary containment
- Perform 90 percent design review of BOF programmable protection system (PPJ)

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data Data as of: February 2016

River Protection Project
Balance of Facilities (WBS 1.05)

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$6,160	$6,249	$7,006	1.01	0.89	$6,160	$6,249	$7,006	1.01	0.89
Nov 2015	$4,555	$3,913	$4,344	0.86	0.90	$10,715	$10,162	$11,350	0.95	0.90
Dec 2015	$3,400	$3,134	$3,917	0.92	0.80	$14,115	$13,296	$15,267	0.94	0.87
Jan 2016	$3,874	$3,917	$3,108	1.01	1.26	$17,989	$17,214	$18,375	0.96	0.94
Feb 2016	$4,367	$4,344	$4,357	0.99	1.00	$22,356	$21,557	$22,732	0.96	0.95
Mar 2016	$4,492									
Apr 2016	$7,452									
May 2016	$5,468									
Jun 2016	$5,515									
Jul 2016	$6,561									
Aug 2016	$5,762									
Sep 2016	$8,363									
PTD	$451,851	$446,759	$446,355	0.99	1.00					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date.
EVMS = earned value management system.
FY = fiscal year
SPI = schedule performance index

Analytical Laboratory

Milestone	Title	Due Date	Status
D-00A-05	LAB Construction Substantially Complete	12/31/2012	Complete

LAB = analytical laboratory

The Analytical Laboratory (LAB) will support Waste Treatment and Immobilization Plant (WTP) operations by analyzing feed, vitrified waste, and effluent streams. As of February 2016, the LAB was 59 percent complete overall, with engineering design 76 percent complete, procurement 88 percent complete, construction 94 percent complete, and startup and commissioning 11 percent complete.

During this reporting period engineering efforts were focused on LAB system reviews to evaluate potential modifications or isolations in support of direct feed, low-activity waste (DFLAW). Closure of nonconformance reports and construction deficiency reports continued. Construction efforts within the LAB focused on installation of the test engineers work station to support Balance of Facilities (BOF) startup efforts. The remaining construction work scope will be completed in parallel with system modifications and construction activities required to support the direct feed of LAW.

Significant Accomplishments during the Prior Three Months:

- Completed fire service water system turnover
- Continued installation of the test engineers workstation – installed and tested fiber
- Continued development of procedures for the WTP analytical methods development process.

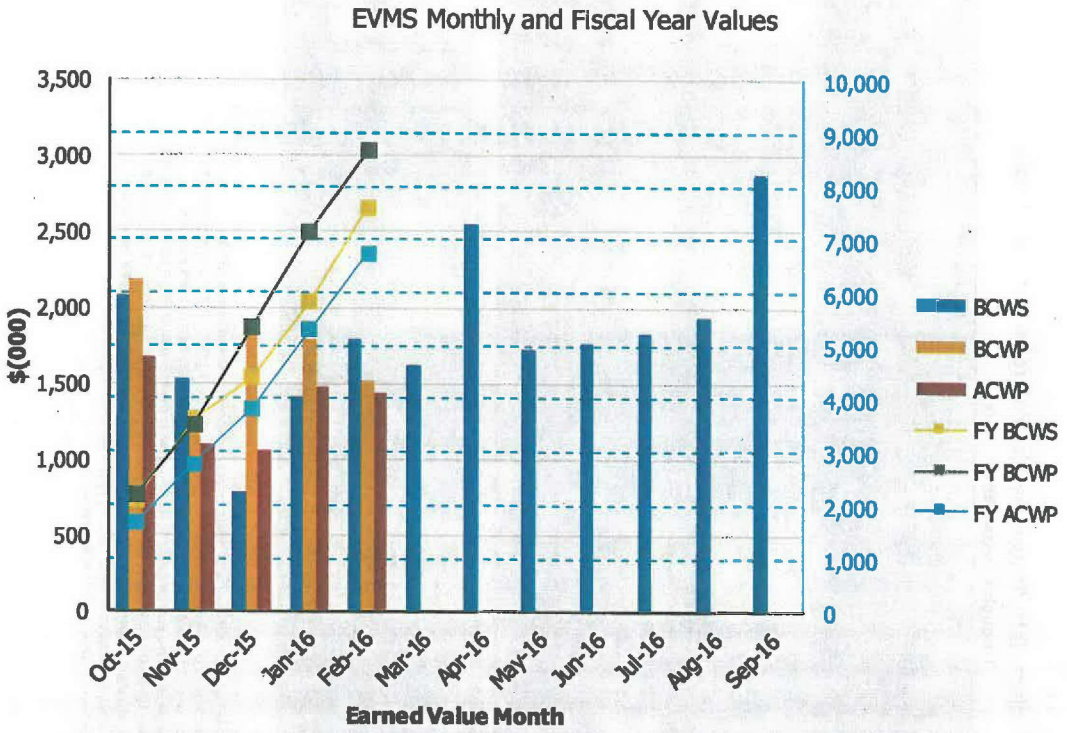
Significant Planned Activities in the Next Three Months:

- Complete test engineers work station
- Initiate component level testing of select LAB systems
- Complete LAB system walk downs in support of DFLAW modifications.

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data Data as of: February 2016

River Protection Project
Analytical Laboratory (WBS 1.06)



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	$2,083	$2,188	$1,674	1.05	1.31	$2,083	$2,188	$1,674	1.05	1.31
Nov 2015	$1,528	$1,324	$1,093	0.87	1.21	$3,611	$3,513	$2,768	0.97	1.27
Dec 2015	$789	$1,844	$1,060	2.34	1.74	$4,399	$5,356	$3,827	1.22	1.40
Jan 2016	$1,415	$1,797	$1,472	1.27	1.22	$5,815	$7,153	$5,299	1.23	1.35
Feb 2016	$1,786	$1,511	$1,438	0.85	1.05	$7,601	$8,665	$6,738	1.14	1.29
Mar 2016	$1,628									
Apr 2016	$2,555									
May 2016	$1,732									
Jun 2016	$1,765									
Jul 2016	$1,826									
Aug 2016	$1,933									
Sep 2016	$2,880									
PTD	$320,166	$319,583	$315,086	1.00	1.01					

ACWP = actual cost of work performed.
BCWP = budgeted cost of work performed.
BCWS = budgeted cost of work scheduled.
CPI = cost performance index.
CTD = contract to date.
EVMS = earned value management system.
FY = fiscal year
SPI = schedule performance index.

Waste Treatment Plant Project Percent Complete Status (Table)

Waste Treatment Plant Project - (LBL/Project Services) Percent Complete Status

Through February 2016

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Shared Services Unallocated Dollars		
Facilities	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	Com
Low-Activity Waste	2,272.0	1,196.6	53%	531.2	387.3	73%	372.2	261.3	70%	658.1	507.6	77%	706.5	36.3	5%	4.0	4.0	10
Balance of Facilities	755.7	419.0	55%	149.8	112.7	75%	71.6	54.5	76%	253.8	208.4	82%	280.1	43.0	15%	0.5	0.5	10
Analytical Lab	530.5	311.6	59%	106.1	81.0	76%	65.4	57.4	88%	160.7	151.1	94%	197.9	21.7	11%	0.5	0.5	10
LBL Facility Services	605.4	90.8	15%	0.0	0.0	0%	53.4	14.0	26%	128.9	16.6	13%	264.5	29.4	11%	158.6	30.82	19
Total LBL	4,163.6	2,018.0	48%	787.0	581.0	74%	562.6	387.2	69%	1,201.4	883.7	74%	1,449.1	130.4	9%	163.6	35.8	2
Direct Feed LAW	371.8	32.4	9%	79.8	26.2	33%	57.00	0.61	1%	226.1	3.6	2%	0.0	0.0	0%	9.0	1.96	2
Project Services	368.5	271.5	74%	53.3	37.5	70%	34.9	24.9	71%	70.4	60.6	86%	1.7	1.7	100%	208.2	146.7	7
Total DFLAW & PS	740.3	303.8	41%	133.0	63.7	48%	91.9	25.5	28%	296.5	64.2	22%	1.7	1.7	100%	217.1	148.7	6
Total LBL, DFLAW & Project Services	4,903.9	2,321.8	47%	920.1	644.7	70%	654.5	412.7	63%	1,497.8	947.9	63%	1,450.8	132.1	9%	380.7	184.5	4
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)																		
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%	n/a	n/a	r
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%	n/a	n/a	r
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%	1,338.1	983.5	7
Total HLW/PT/SS	8,722.8	5,965.2	68%	2,173.1	1,948.9	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	758.5	143.2	19%	1,338.1	983.5	7
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	r
Total WTP	13,626.7	8,287.0	61%	3,093.2	2,593.6	84%	2,220.0	1,537.5	69%	4,385.4	2,712.7	62%	2,209.3	275.3	12%	1,718.8	1,168.0	6

Source: Preliminary WTP Contract Performance Report - Format 1, Data for February 2016

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is $2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values. In March 2014, Project Controls and Project Management work scope was moved out of Shared Services control accounts into the facilities with new control accounts being set up in the facilities. These will now be seen under Project Management/Shared Services by facility. The Shared Services PMB value has not been changed to reflect this change due to the freeze on HLW/PT and SS and the budgets remaining in UB. October 2014 data reflects the incorporation of Direct Feed LAW and the split of Shared Services into LBL Facility Services and Project Services. July 2015 LBL percent complete data is a total of LAW-BOF-LAB and LBL Facility Services. The Project Services Allocation account (zPSA), as shown on the CPR Format 1, is not added to LBL for percent complete purposes.